

Journal of the Royal Institute of British Architects

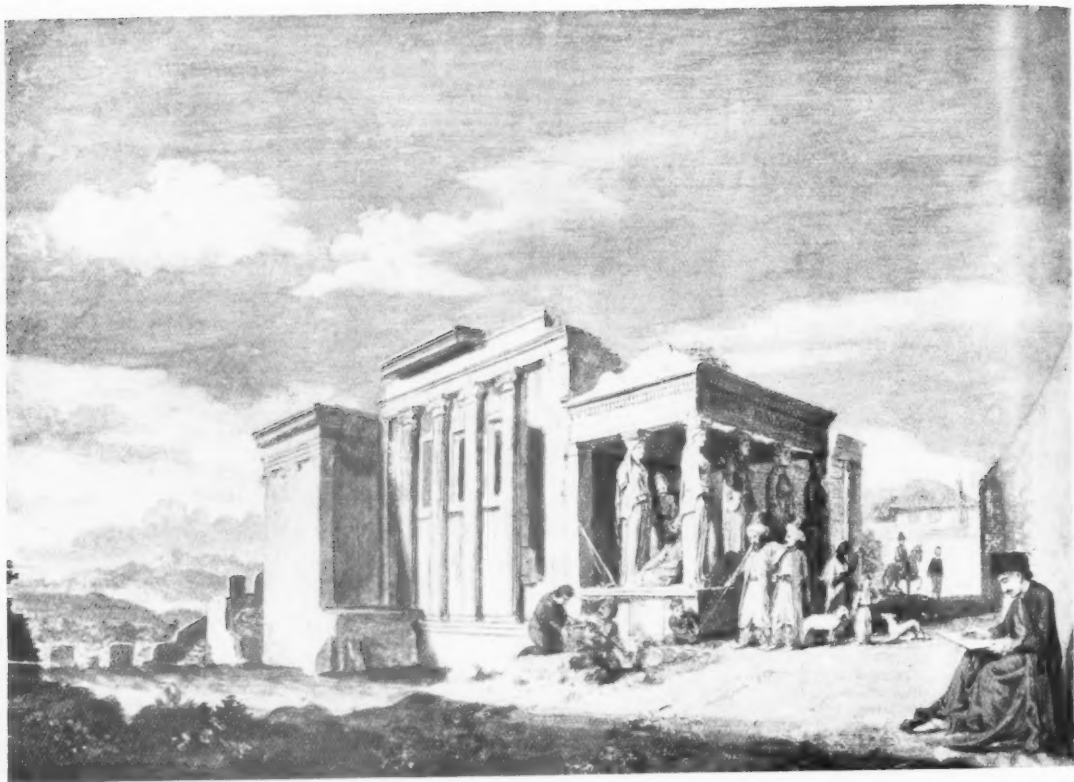
THIRD SERIES

VOL. XXXVI. No. 4

22 DECEMBER 1928

Contents for 22 December 1928

	Page
THE ERECHTHEION. WATER COLOUR DRAWING. By James Stuart	<i>Frontispiece</i>
THE DEVELOPMENT OF THE STŪPA. By A. H. Longhurst	135
REPORT OF THE ROYAL FINE ART COMMISSION	150
REVIEWS :	
THE STORY OF THE TEMPLE AND ITS ASSOCIATIONS. By Sir Banister Fletcher	152
NINTH ANNUAL REPORT OF THE MINISTRY OF HEALTH. By Arthur Keen	153
MORE ANCIENT BUILDING TERMS. By Beatrice Saxon Snell, M.A.	154
THE PRESERVATION OF RURAL ENGLAND	159
DUNSTER YARN MARKET	160
PRESIDENT OF THE ROYAL ACADEMY	160
MR. E. H. NEW'S LATEST PRINT. By R. D.	160
EARLY USE OF CONCRETE By H. V. M. R.	160
SCHOOLS OF ARCHITECTURE—THIRD SERIES :	
LEEDS SCHOOL OF ARCHITECTURE. By Joseph Addison	161
ALLIED SOCIETIES :	
SHEFFIELD, SOUTH YORKSHIRE AND DISTRICT SOCIETY OF ARCHITECTS AND SURVEYORS	164
NORTH WALES ARCHITECTURAL SOCIETY	165
THE WESSEX SOCIETY OF ARCHITECTS	165
SALE OF 28 BEDFORD SQUARE	166
ARCHITECTURAL COMPETITIONS	166
THE DEVELOPMENT OF THE R.I.B.A.	168
THE INTERMEDIATE EXAMINATION	170
R.I.B.A. STATUTORY EXAMINATIONS	170
ELECTION OF STUDENTS R.I.B.A.	170
R.I.B.A. PROBATIONERS	170
NOTICES	172
APPLICATIONS FOR MEMBERSHIP	173
COMPETITIONS	174
MEMBERS' COLUMN	175
MINUTES	176
A.B.S. OPTIONAL POLICY	176



THE ERECHTHEION

Water-Colour Drawing by James Stuart (1713-88)

R.I.B.A. Collection

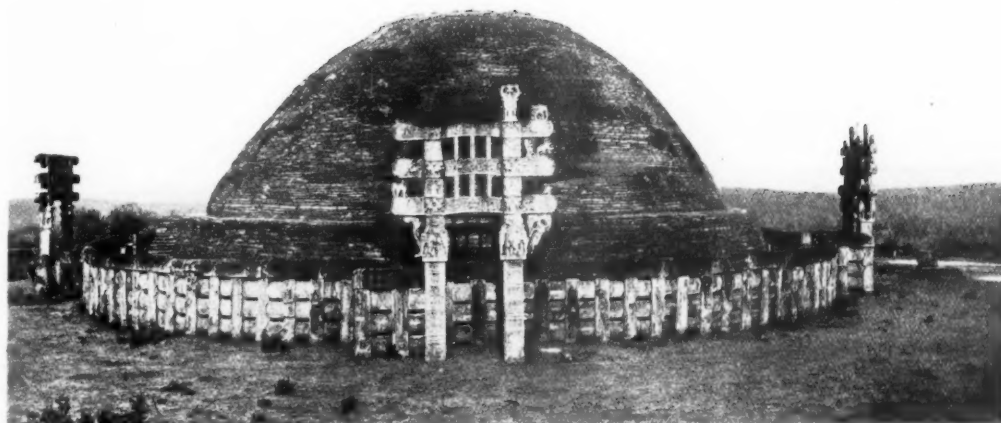


FIG. 2.—EAST VIEW OF SANCHI STŪPA

The Development of the Stūpa

BY A. H. LONGHURST, ARCHÆOLOGICAL SURVEY OF INDIA

AS a symbol of authority and power, the umbrella first appears in the mural paintings of the Ancient Egyptians, and later in the bas-reliefs of the Assyrians. Many Egyptian pictures, dating hundreds of years before the bas-reliefs of the Assyrians, portray the umbrella as an appendage of a priest or prince; whilst some of the Assyrian sculptures show slaves holding a richly-ornamented umbrella above the head of the monarch, not only in scenes of peace, but even in time of war. Some good examples of these Assyrian umbrellas dating back to the eighth century B.C. may be seen among the bas-reliefs in the Nineveh Gallery of the British Museum. They appear to have been made of wood covered with cloth and usually fringed with tassels. Some are conical in shape and not unlike the modern State umbrellas used in Burma and China at the present day, while others have round, flat, wheel-like canopies like those depicted in the earliest Buddhist sculptures of India. Similar scenes are reported to be depicted on some of the most ancient sculptures of Persepolis. We know that the Greeks used the umbrella as a mark of elevated rank, the custom being borrowed from the earlier empires, but after the rise of the Roman power the umbrella seems to have lost its royal significance in Europe.

It is in Asia, however, that the umbrella plays such an important part in the life and history of the people. Here it is not only a symbol of sovereignty, but partakes of a religious character, and is often an object of veneration. This is particularly the case in Buddhist countries like Burma, China and Siam. The pagoda, as we shall see, is mainly a development of the umbrella. But since the existing religions and architecture of these countries, for the most part, originally came from India, it is to this country that we must turn in order to trace the origin and development of the umbrella as an important feature in the development of Oriental architecture.

Unfortunately, none of the sculptural antiquities which survive in India can be dated earlier than 250 B.C. These remains are all connected with religion; and the form of religion which they illustrate is Buddhism. It is with the reign of Asoka, the great Emperor (264-227 B.C.) whose rule extended practically over the whole Peninsula, that the history of Indian art can really be said to begin. Originally an adherent of the Brahman religion, he became a convert to the doctrine of the Buddha and devoted himself to promoting its interests during the remainder of his life. To his reign belong the great stone columns with Persepolitan capitals that are engraved with his

religious edicts. On these inscribed columns or *lats*, besides the bell-shaped Persepolitan capital, we find the honeysuckle with the bead and reel and cable ornaments so familiar in the earlier Assyrian and Persian sculpture, which seems to indicate that it was from Persia that these forms first came to India. About 250 B.C., we find Asoka in communication with the contemporary kings of Syria, Egypt, Macedonia, Epirus and Cyrene. The arts and customs of these countries would naturally attract the attention of Indian visitors, whether ambassadors, missionaries or merchants; and such visitors would be sure to convey a knowledge of these arts to their own countrymen on their return to India. The art of every country must necessarily assimilate to itself motifs and ideas from neighbouring cultures with which, directly or indirectly, it comes in contact; and Indian art was no exception to the rule.

Besides erecting the stone columns, Asoka rebuilt his capital at Pataliputra (Patna) and erected innumerable stūpas or relic-mounds and monasteries throughout the country. It is in connection with these stūpas that the umbrella played such an important part, subsequently becoming, in a conventionalised form, the most prominent feature of Oriental architecture.

We do not know how or when the umbrella first became the recognised symbol of authority in India, but from the singular resemblance between the umbrellas portrayed in the earliest Buddhist sculptures and those depicted in the still earlier Assyrian and Persian bas-reliefs, there appears good reason to assume that it was from Persia that the idea first came, which led to its adoption in India as the emblem of sovereignty.

The stūpa or tope is a dome-shaped structure which was a development of the low sculptural tumulus or cairn of earth of the prehistoric period, in which bricks were substituted for earth and stones with a view to durability. The purpose for which they were erected by the Buddhists was to serve as monuments enclosing relics of the Buddha or of Buddhist saints, which were placed in a stone coffer. Some, however, contained no relics, but were only commemorative of important events or miracles connected with the life of the Great Teacher. The word "tope" is a corruption of the Pali *thūpa* and the Sanskrit *stūpa*, a mound or tumulus. Stūpa or tope is therefore a name common to each kind of tumulus; whether it be the solid structure dedicated to the Supreme Being, or masonry mound erected over the relics of Buddha, or of one of his eminent followers.

The earliest stūpas were circular on plan and very low in proportion to their basal diameter, resembling in outline their prototypes of the prehistoric period. Those shown in Fig. 1, A to D, represent stūpas of the Asokan age, D being the earliest in style. The

stūpa was built of brick and covered with plaster, and around its base was a procession path a few feet wide enclosed by a wooden railing. As time went on and the building arts progressed, the relative height increased as shown in Fig. 1 A. Here the dome rests on a high round masonry drum provided with a narrow procession path enclosed by a railing, and the plaster work is decorated with a garland ornament. This style of stūpa is about a century later than D type. The bas-relief marked E is from the famous Amarāvati Stūpa, erected about 200 A.D. Here the stūpa has become much higher and profusely decorated with Nagas or serpents below and a group of lotus-leaf sunshades above. In these ancient sculptures, the figures depicted round the base of the stūpas represent human worshippers, those above are Buddhist angels bringing garlands and banners to decorate the shrine. It will thus be seen that the approximate age of any stūpa may be determined from its shape, the earliest being a simple hemisphere and the latest a lofty round tower surmounted by an elongated *tee*.

On the summit of the dome was a stone box-like structure known to Indian archaeologists as the *tee*. This word is an Anglicised form of the Burmese "Hti," by which this member is known; in Sanskrit it is called *harmikā*. The *tee* was always surmounted by one or more umbrellas (the Indian emblem of sovereignty), which were usually grouped together and termed *Chhatravālī*, and the shaft supporting the canopies the *yashti*. The *tee* has disappeared from all the structural stūpas in India, but its form can be seen from stūpas surviving in Nepal and Ceylon, as well as from stone models and sculptural representations preserved in great numbers in India. The box-like nature of construction shown in these representations of the *tee*, and the fact that all the structural *tees* in India have been destroyed, presumably by treasure-seekers, seems to indicate that they were used mainly as stone coffers or receptacles for valuable offerings presented to the shrine by pious pilgrims. They are always represented as a strong stone coffer, square on plan, with a massive lid of the same material, the latter as a rule consisting of three or more stone slabs placed one above the other, the top slab being larger than the others (Fig. 1). The sides of the *tee* were usually decorated with the rail ornament. Fixed to the lid of the *tee* was an umbrella, with one or more canopies, made of wood, stone, and later of copper gilded in imitation of gold. These emblems of sovereignty are always represented as being fixed to the lid of the *tee* in such a manner as made it impossible to open the latter without first removing the umbrella. In this manner, the umbrella appears to have served not merely as a minister of dignity in the service of religion, but also as a means of proclaiming to the public that Buddhism was the recognised

religion of the state, and that the stūpas were under the protection of the monarch.

All important stūpas were originally provided with railings, and gateways known as *toranas*, at each of the cardinal points, enclosing a procession path and sacred precinct. The existing specimens, the best known of which are those surrounding the famous Sāncī Stūpa, illustrated in Fig. 2, show that both rails and *toranas*

in wood, and used as gateways to simulated tombs just as their prototypes were used in India two thousand years ago.

In the earliest Buddhist sculptures, the umbrella is reserved exclusively as a mark of distinction for the monarch or ruling chiefs portrayed in the bas-reliefs, except where it appears in the service of religion, when it is used as a conventional means of denoting the



A



B



E



C



D

FIG. 1.—A TO D, RELIEFS FROM THE GATEWAYS OF SĀNCĪ STŪPA; E, RELIEF FROM AMARĀVATĪ STŪPA

were usually made of wood, but where durability was considered of paramount importance, these timber forms were copied in stone. The Sāncī *toranas* are among the most important monuments in the representation of early Indian sculpture, and are adorned with numerous bas-reliefs of great beauty, and iconographical interest. The *toranas* were introduced into Korea, China and Japan along with the Buddhist architecture from India about 600 A.D., and in these countries they are still frequently constructed

presence of the Buddha. In early Buddhist art, figures or images of the Buddha never appear, for the very good reason that a definite type of a personal Buddha had not yet been evolved, so he was represented by a symbol, such as the wheel or *dharma* symbol, a pair of foot-prints, a stūpa, or the sacred Bodhi tree, these representations of sacred symbols are always shown as being overshadowed by one or more honour-conferring umbrellas.

In the ancient Singhalese chronicle, the *Mahāvamsa*,

is a long account of Dutthāgamani's building and consecration of the Mahā Thupo, or Great Stūpa in Ceylon. It gives interesting details of the whole ceremony and describes how the king dedicated his royal umbrella to the relics enshrined in the stūpa, exclaiming with joy:—"Thrice over do I dedicate my kingdom to the redeemer of the world, the divine teacher, the bearer of the triple canopy, the canopy of the heavenly host, the canopy of mortals, and the canopy of eternal emancipation." He next made an offering of all the costly ornaments on his royal person, and "for seven days invested the relics with the sovereignty of Ceylon (the royal umbrella)." Presumably, when the building of the stūpa was completed, the royal umbrella was replaced by a stone or wooden copy of the same shape.

In all probability, it was during the reign of Asoka, after he made Buddhism the religion of the state, that the umbrella first became associated with the stūpa. Supposing this hypothesis to be correct, we may assume that the ruling chiefs would follow the example set by the monarch; and thus the number of votive umbrellas overshadowing a celebrated stūpa would increase as time went on. That something of the kind did actually occur is obvious from the Sānchī bas-reliefs shown in Fig. 1, for here we have representations of stūpas overshadowed by single, double, and triple-canopied umbrellas, together with groups of umbrellas numbering from three to five. From these old bas-reliefs we can see the manner in which these honorific umbrellas were originally multiplied and grouped, but there is as yet no conventionalising them, so as to produce the pyramid of discs which subsequently came to be recognised as the symbol of the whole. They are unmistakable umbrellas, usually adorned with garlands. But we do find in these sculptures representations of two and even three umbrellas placed one above the other, the double and triple canopies of which are fixed to the same staff as in the modern ecclesiastical umbrellas of China, Siam and Burma. Thus we have the primary idea of the accumulated honour of the pyramid of stone or metal discs, which subsequently became such a prominent feature of Buddhist architecture, culminating in the many-storeyed pagodas of China and Japan.

So far as one can judge from the Sānchī bas-reliefs, the royal umbrellas of the Asokan age were similar in style and construction to the modern Hindu umbrella shown in Fig. 3. This type of umbrella is made of wood covered with cloth and decorated with a gold fringe and a gilt metal finial. They are carried over the images of the Hindu gods when the latter are taken in procession in Juggernaut cars during the annual religious festivals. It is obvious that umbrellas of this kind would quickly perish if left to the mercy of the elements on the summit of a stūpa, so probably



FIG. 3.—MODERN FLAT UMBRELLA FROM MADRAS

it was this consideration which led to the custom of having these votive umbrellas prepared of wood, stone or metal.

The only ancient wooden umbrella that still exists is the well-known example that crowns the rock-cut stūpa in the famous Karlē temple in the Bombay Presidency. But stone specimens are fairly common. Ancient metal umbrellas are rare in India now, although they seem to have been common enough in the seventh century A.D., when the Chinese pilgrim Hiuen Tsiang visited India, for he expressly states that several of the famous Buddhist shrines that he visited were crowned with copper-gilt *chattas* (umbrellas). The umbrellas depicted in the Sānchī bas-reliefs (Fig. 1) appear to represent carved wooden umbrellas similar in style to the one remaining at Karlē; as it would have been impossible to have grouped them in the manner portrayed had they been made of stone. The latter material seems to have been used only for single-canopied umbrellas and rock-cut specimens.

Although the umbrellas, like the *tees*, which together crowned the early structural stūpas, have completely

disappeared, we still have in India plenty of rock-cut specimens and numerous stone models illustrating the successive stages through which these conventionalised groups of umbrellas passed before assuming the form of a solid stone spire. It seems that the Buddhists, and the Jains too, for that matter, believed that the relics enshrined in a stūpa or a temple were honoured in direct ratio to the number of umbrellas or canopies set up over them. In Southern India we find in some of the sculptures belonging to the famous Amarāvati Stūpa and dating to the second century A.D., the highest ideal of honour is expressed by the use of the sacred lotus leaf as a sunshade (Fig. 1 (E)).

The different stages of development are well shown in the chronologically successive rock-cut specimens and stone models illustrated in Figs. 4 to 8. It will be noticed that, concurrently with the elongation of the *tee*, there is also an elongation of the body of the stūpa, until finally we arrive at the last development



FIG. 4.—ROCK-CUT STŪPA AT KANHERI



FIG. 5.—ROCK-CUT STŪPA IN A CHAITYA AT DHAMNAR

where the *tee* is practically all that is left. Another striking feature in the development of the stūpa, as shown in these illustrations, is that figure sculpture has superseded the plainer architectural forms of the earlier stūpas, and the Buddha has now been introduced in all his conventional attitudes and is even the object of worship, his image being placed in front of the stūpa.

The rock-cut stūpa shown in Fig. 4 is from Kanheri in the Bombay Presidency, and is an early example. It is circular on plan, low in proportion to its height, and free from ornament. The umbrella is of the plain wheel-like type portrayed in the Sāncī sculptures. It stands in a little shrine chamber hewn out of the natural rock. The hole shown in its side represents the work of treasure-seekers. The next example (Fig. 5) is from Dhamnar in Rajputana. A description of the Dhamnar monuments will be found in Volume II of Cunningham's Reports. It stands in a small oblong rock-cut chaitya or temple measuring $23\frac{1}{2}$ feet in length and 15 feet in width. The vaulted roof of the shrine is ribbed in imitation of a wooden structure. The stūpa itself, which is also carved out

of the natural rock, is $16\frac{1}{2}$ feet in height, and stands on a square base $9\frac{1}{2}$ feet in width. The body of the stūpa is similar to the last example, but being raised on a square basement makes it higher than the Kanheri stūpa. The *tee* itself is of normal shape, but the double-canopied umbrella decorated with the lotus-leaf ornament is a most original design, and reminiscent of the peculiar sunshades that we have already noticed in the Amarāvati sculpture, shown in Fig. 1 (E). Owing to the absence of inscriptions, the age of the Dhamnar excavations is a little difficult to determine. But from the lofty form of this stūpa, its square basement, and the style of its umbrella, it probably belongs to the sixth century A.D.

The combined elongation of the stūpa and the *tee* is well represented in Fig. 6, a late specimen from Cave 19 at Ajanta. Here the low hemisphere of the Asokan age has become conventionalised into a lofty ornamental tower surmounting an elaborately carved base, square on plan with doubly-recessed angles. But



FIG. 6.—ROCK-CUT STŪPA AT AJANTA

stranger still is the form the triple umbrella has assumed. It is now a tall steeple-like object reaching to the roof of the rock-cut temple in which it stands. Its original form and meaning would hardly be suspected by those who were not familiar with the intermediate steps. The stone canopies of the umbrella are ornamented with the lotus-leaf design and supported by little figures of *ganas* or dwarfs, while the summit is crowned with a miniature ball-like stūpa as a finial. Carved on the front face of the stūpa, and standing under a *makara-torana*, is an image of the Buddha as the object of worship. Thus we find that in the seventh century A.D., or thereabouts, the stūpa had assumed the shape of a temple square on plan, with a domed roof surmounted by an ornamental spire. Nor was it in external appearance only that the stūpa had assumed this new form. For among the numerous stone and brick models of small votive stūpas erected by pious pilgrims around the great brick temple at Bodh Gaya, and the Shambu Nāth Stūpa in Nepal, we find many examples of stūpas with hollow interiors, purposely excavated as a shrine chamber for the reception of an image of the Buddha. (Fig. 7.)

When Buddhist pilgrims visited any of the famous sites connected with the life of their Great Teacher, it was their invariable custom to make some offering, no matter how poor, to the shrine, and at the same time set up some memorial of their visit. These offerings consisted of money, jewels, and other costly articles by the rich, and of fruit and flowers by the poor. The memorials usually took the form of stūpas and temples of all sizes by the wealthy, and of small stone models of stūpas and temples, or inscribed clay tablets and seals by the poor. There is a great variety in the shape and style of these votive stūpas as may be seen in Fig. 7, from the low hemisphere of the time of Asoka to the tall ornamental spire surmounting the mediæval dome, with square base. In these later examples we find figures of Buddha placed in decorated niches on each side of the base, while the different tiers of mouldings are often separated by rows of sculptural figures.

The Shambu-Nāth Stūpa, near Katmandu, the capital of Nepal (Fig. 7), is dedicated to Swayambhu Buddha—the Self Existent—and is the most popular place of Lamaist pilgrimage outside Tibet. Immense numbers of Tibetans, both Lamas and laity, visit the stūpa every winter, and encamp in the surrounding fields for making offerings to the shrine and circumambulating the sacred spot. Its special virtue is reputed to be its power of granting all prayers for worldly wealth, children, and everything else asked for. The stūpa stands on the top of a forest-clad hill about a mile to the west of Katmandu, and consists of a solid masonry hemisphere standing on a low circular

drum or basement. The dome is about 60 feet in diameter and 30 feet in height. The drum, or basement, is decorated with a simulated railing enclosing a procession path around the structure, and built

lofty *tee* on the summit of the dome is approached by a narrow flight of steps which run up the curved face of the dome. The four faces of the *tee* are covered with copper plates and have a large pair of eyes, painted



FIG. 7.—SHAMBU-NĀTH STŪPA, NEAR KATMANDU, NEPAL

partly into this basement are five large ornamental niches, four of which face the cardinal points of the compass. Each niche thus forms a separate shrine which is plated with copper-gilt, and contains a metal image of Buddha rather larger than life-size. The

in crimson, white and black colours, on each of the four sides. These eyes denote that the stūpa is dedicated to the celestial Buddha, the Divine Spirit, who is "Light." Springing from above the cornice around the four sides of the *tee* are four pentagonal escutcheons,

also of copper-gilt, on each face of which are riveted five small metal images of the Dyāni Buddhas. Above the *tee*, instead of the usual group of conventionalised

that of Adi Buddha, while the great eyes painted on the four sides of the *tee* signify his omnipresence.

The Gandhāra example of a small stone model of



FIG. 8.—STONE MODEL STŪPA, GANDHĀRA SCHOOL

umbrellas, we have a great pyramid of thirteen discs or canopies, crowned with a large single metal umbrella as a finial. These thirteen canopies represent the thirteen heavens of Buddhist cosmography, and the single umbrella above denotes the highest heaven, or

a stūpa shown in Fig. 8 indicates that the manner in which the honorific umbrellas are grouped so as to produce a pyramid of discs above the *tee* of the Shambhū-Nāth stūpa, originated with the artists of the Gandhāra school before fifth century A.D. The Corinthian



FIG. 9.—SAPADA STŪPA, PAGAN, BURMA



FIG. 10.—SEINNYET STŪPA, PAGAN, BURMA

capital on which the model of the stūpa stands, and the semi-classical style of the figures of the worshippers, show that this little model is not later than that date, and may be much earlier.

The stūpa stands on a paved terrace which is literally covered with small temples, shrines, votive stūpas, and memorial slabs set up by pious pilgrims as memorials of their visit. To the student of architecture this

and pyramid of discs obviously belong to mediæval times.

Unfortunately in India all the later structural examples of stūpas are in ruins, the upper portions having decayed or been wantonly destroyed by treasure-seekers. But in Ceylon and Burma a few good specimens belonging to this period still survive. As representative of this class of stūpa we may take the



FIG. 11.—TAWGYAGYAUNG STŪPA, MANDALAY

collection of shrines and temples, which are of various ages and in different styles, forms a particularly interesting study, and will be referred to again later on.

Of the age and history of the stūpa there is nothing really authentic, except records of restorations, which go back only to the sixteenth century, but tradition relates that the original stūpa was built by Gorades, a Rājā of Nepal, some two thousand years ago. The form of the drum and dome of the stūpa seems to indicate an early date for this portion of the structure, but the five shrines built into the basement, the *tee*,

Sapada and Seinnyet Stūpas at Pagān in Burma, illustrated in Figs. 9 and 10. The former was built by a Burmese monk named Sapada, who received his ordination in Ceylon, and who founded a sect at Pagān during the reign of Narapatisithu (1167-1204 A.D.). It is the prototype of similar structures in the Province, and is a landmark in the history of Buddhism, as it commemorates the religious intercourse between Burma and Ceylon. It stands on a raised brick terrace 88 feet square, and access to it is obtained by a flight of steps on the eastern and western sides. The steps are pro-

vided with an ornamental brick and plaster *torana* or gateway. There is not much resemblance between the latter and the *toranas* at Sāñchī (Fig. 2). The style of the stūpa clearly shows that the pious monk Sapada took for his model a stūpa that he had seen in Ceylon, a type of stūpa which had been introduced into that country from Southern India. It will be noticed that the structure, which is built of brick and plaster, is still circular on plan, and although the body of the stūpa is much elongated and decorated with tiers of mouldings, the bell-shaped dome is crowned with a well-defined box-like *tee*, surmounted by the usual mediæval spire. Although the stūpa was built in the twelfth century A.D., its style is that of the great brick stūpas of India belonging to the seventh century A.D.

The Seinnyet Stūpa is said to have been built prior to the Sapada structure, but if so it is certainly more than half a century later in style, and represents a local development of the Indian type of stūpa. The stūpa is built of brick and plaster and profusely decorated with stucco ornament and figures of Buddha placed in niches on the four sides of the dome; it stands on a lofty square basement consisting of three receding terraces placed one above the other, the angles of which are decorated with little model stūpas guarded by conventional lions. All three terraces are decorated with miniature battlements and embellished with mouldings in brick and plaster, which is a characteristic feature of the square basement of all later Burmese stūpas. The bell-shaped dome is bisected by a bold moulding representing in stucco relief a row of demons' heads disgorging chaplets of pearls, a form of ornamentation common in India from the earliest times. On four sides of this moulding, facing the cardinal points, is an ornamental niche resembling in design the façade of the Mahābodhi Temple at Bodh-Gayā. In each niche sits enshrined a small figure of a Buddha in a preaching attitude.

The last stage in the development of the stūpa in Burma is well represented by the Tawgyaung Stūpa at Mandalay (Fig. 11). The square triple terrace base on which the stūpa stands is supposed to indicate the sacred Mount Meru, and presumably the conventional lions at the four corners symbolise the guardians of the four quarters of the world. The octagonal base of the stūpa represents the *Tushita* heaven, the abode of all Bodhisats or Buddhas in embryo, while the elongated bell-shaped dome symbolises the highest heaven in which the Buddhas reside after attaining complete enlightenment. It is a quaint edifice, suggesting the art of the confectioner rather than that of the architect. At first glance it is certainly a little difficult to realise that this curious building is the lineal descendant of the primitive type of tomb shown

in Fig. 1; but I trust the illustrations of the successive stages given here clearly demonstrate the connection.

One naturally wonders how and when Buddhism first reached Burma. Although a certain amount of Chinese influence is discernible in some of the later



FIG. 12.—EARLY BUDDHIST TEMPLE AT NYAUNGU, BURMA

monuments, all the earlier buildings and sculpture are similar in style to the later Buddhist monuments of India, and to those of Southern India in particular.

Kāñchipuram, now the modern town of Conjeeveram, was the ancient capital of the Pallavas of Southern India from very early times, and in the fifth century A.D. a great centre of the Hinayāna form of

Buddhism and the home of Dhammapāla, the great commentator, and a contemporary of the famous Buddhaghosa of that period. The Pallavas had two

Scriptures and architecture of Southern India found their way into Burma about 600 A.D. Thus, accounting for the striking resemblance between the earliest



FIG. 13.—BUDDHIST TEMPLE AT PAGĀN, BURMA

important seaports, one at Mamallapuram (near Kānchipuram), and the other Nagipattanam (Nagapatam) further south. In all probability, it was mainly from these two ports that the Buddhist

Buddhist monuments of Burma and the later examples found in India. It must be remembered that when Buddhism was a new and flourishing religion in Burma, that religion was practically dead in India. By 700 A.D.,

as the development of the stūpa traced above clearly shows, the Buddhist religion had become gradually idolatrous and closely resembled Hinduism, until at last it succumbed altogether in face of the revival of Hinduism, which had absorbed much of the ethical teaching of Buddhism, and had even come to acknowledge Buddha as one of the ten incarnations of Vishnu. Thus Buddhism, which had originally emerged from the older Brahmanism, again relapsed in India, after

example of this type of hollow stūpa is shown in Fig. 12. The entrances into these temples are usually designed to represent a Burmese *torana* like the one giving access to the Sapada Stūpa (Fig. 9). The next example is a Buddhist temple at Pagān, which contains a brick model of a stūpa as the object of worship (Fig. 13). Here the basement is no longer a solid mass of brickwork containing a cell pierced in its centre as in the Nyaungu example, but a carefully



FIG. 14.—LATER BUDDHIST TEMPLE AT PAGĀN, BURMA

more than a thousand years, into a later form of the same religion.

Unfortunately, in India, very few structural Buddhist temples survive, but in Burma a few good specimens may still be seen. They are all built of brick and plaster, and the earliest examples are nothing more nor less than hollow stūpas. The lofty basement or terrace on which the structure stands is square on plan and contains a cell or chamber in which an image of Buddha, or a model of a stūpa, was placed as the object of worship. These shrine cells are in the centre of the basement, so that the image occupies the very same position which the relics of Buddha occupied in the earliest stūpas. A good

constructed temple, square on plan, with an entrance on each of the four sides. The roof takes the form of a stūpa mounted on a two-storeyed terrace decorated with little turrets at the angles. At a still later date this type of Burmese temple grew in size and in height, until at last, with the exception of the dome-shaped ornament crowning the summit of the roof, very little of the original design remains to indicate the origin of the building (Fig. 14). The wonderful pagodas of Siam, Cambodia and Java were all developed on similar lines, and all may be traced back to the Indian Stūpa.

The stone models of Buddhist temples found in India show that in style the latter were similar to

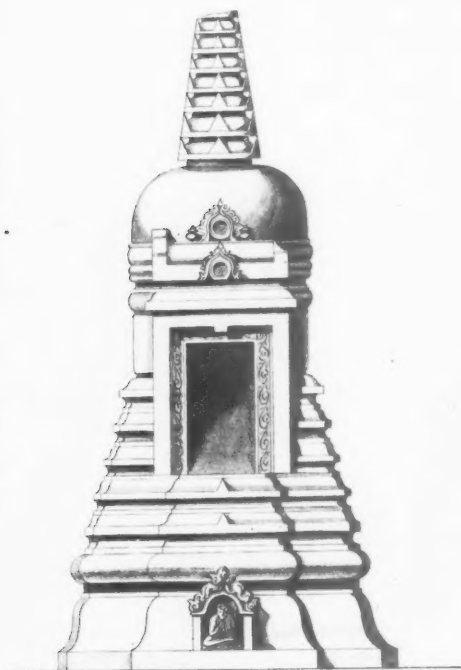


FIG. 15.—STONE MODEL OF A BUDDHIST TEMPLE
FROM BODH-GAYĀ

the earliest examples found in Burma. Some of the best specimens will be found in the enclosures belonging to the Shambu-Nāth Stūpa in Nepal (Fig. 7), and the great brick temple at Bodh-Gayā. The stone model of a Buddhist temple, shown in Fig. 15, was discovered by General Cunningham and described and illustrated in his book, *Mahā-Bodhi*. The body of the stūpa stands on a lofty square basement with doubly-recessed angles like the Ajanta example (Fig. 6), and is provided with a small entrance portico with a barrel-vaulted roof. The *tee* has disappeared, but the *chhatravali* ornament surmounting the dome has now assumed the form of a solid stone spire consisting of a pyramid of discs. The upper portion of the spire is broken, but when complete it was similar in all respects to the one crowning the stone model of a stūpa illustrated in Fig. 16, a specimen discovered at Sarnāth and now in the Sarnāth Museum. The nine rings represent copper gilt *chattas*, or umbrellas, which were decorated with bells; the latter are indicated in the stone models by little triangular projections below

each ring. The summit of the *chhatravali* was always crowned by a larger and more ornamental *chatta* than those below, because this crowning member represents the highest Buddhist Heaven, the abode of Adi Buddha. Metal *chhatravalis* of this kind no longer exist in India, although they seem to have been common enough in the seventh century when Hiuen Tsiang visited the country, but a few good specimens may still be seen adorning the many-roofed wooden pagodas of China and Japan. The style of the square *tee* surmounting the mediæval dome of the Sarnāth example (Fig. 16), seems to indicate that in structural buildings of this kind this member was sometimes executed in wood, as the sculptor has represented this portion of the model as a wooden roof with upturned angles and the heads of the rafters showing below, like those found in the wooden temples of the Himalayas. In fact, this portion, together with the lofty *chhatravali* might well be meant for a stone model of the top storey of a Japanese pagoda.



FIG. 16.—STONE MEMORIAL STŪPA FROM SARNĀTH

The only structural example of a Buddhist temple of the type just described, so far discovered in India, is the one shown in Fig. 17. This particularly valuable monument was recently discovered by Mr. Page of the Archæological Survey of India at the famous

Gayā example shown in Fig. 15 was copied. The memorial stūpas and shrines grouped round the great Shambu-Nāth Stūpa (Fig. 7) form a very interesting study, especially the wooden Nepalese temple built in the "pagoda" style shown in the foreground of the



FIG. 17.—BUDDHIST TEMPLE AT NALANDA BUILT OF BRICK AND PLASTER

Buddhist site of Nalanda in Bengal. It is built of brick and plaster and decorated with stucco figures and mouldings. The *chhatra-vali* ornament is missing, but otherwise the building is in a good state of preservation. The stūpa itself is of solid brickwork, but it has a small shrine chamber for the reception of an image attached to the front of the edifice. It must have been from a shrine of this kind that the Bodh-

picture. Most people associate this style of wooden architecture with China and Japan, but I hope to be able to show in my next paper on "Himalayan Architecture"* that it originated in India and was introduced into those countries along with the Buddhist religion about 600 A.D.

* We hope to publish Mr. Longhurst's Paper on "Himalayan Architecture" in a later issue of the JOURNAL.—ED.

Report of the Royal Fine Art Commission*

ARCHITECTS AND BRIDGES

OWING to the remarkable growth of traffic, new roads are required, new bridges are being built and old bridges are being reconstructed in all parts of the country; on several occasions our views have been invited upon questions of design.

The Royal Commission notice a tendency to consider bridges as purely utilitarian—merely as short sections of long roads, whereas their influence upon the landscape is profound. It frequently occurs that bridges are designed without due regard to architectural form or relevance to the neighbouring township or countryside, and that when criticism is aroused an architect is engaged to add or modify details. The Commission suggest that competent architectural advice should be invited at the outset, in order that the architect and the engineer may co-operate in considering the problem at its inception and as a whole. This should avoid designs which, however sound from the constructional point of view, may none the less disfigure the countryside, or prove quite unsuitable in urban areas where the architectural treatment may be of the greatest consequence.

With the notable development of road transport and the necessary road-widening all over the country, the design of bridges is of ever increasing importance, while the care for natural scenery, now too frequently threatened, is recognised as an obligation by the Government. In this connection we wish to express our cordial appreciation of the circular issued by the Ministry of Transport in March, 1925. This document was addressed to road authorities throughout the country and lays down in clear terms the principles which should guide the construction of new bridges and the preservation of old, besides dealing with the important question of bridge approaches and the suitability of the structure to its surroundings.

It is unfortunate that the principles so well set out in the circular are not yet universally accepted. We feel justified in repeating that all possible steps should be taken to ensure that bridges towards which large subventions are paid from public funds should be designed with experience and skill. These bridges are public buildings of significance, and deserve as much care as is devoted to less prominent and costly buildings erected by other public authorities. In many cases the selection of a design for such buildings is only determined after a competition has been held. Great bridges also are public monuments, and should be worthy of the commanding positions which they inevitably occupy.

In most cases the bridge is primarily the concern of local authorities, but grants in aid are made by the

Ministry of Transport. The proposal to replace the suspension bridge at Marlow-on-Thames by a new structure, raised the issue of Treasury grants towards local government outlays in a very specific manner. We therefore approached the Ministry of Transport, and as our letter dealt with various aspects of the question, we beg to quote the following passages:—

"The Commission assume that there are adequate reasons for destroying the existing suspension-bridge. Its loss is regrettable, for the bridge has the advantage of being light in structure, and of causing the minimum obstruction to the view from every direction. Moreover the archways at either end are handsome, the respective spheres of architecture and engineering being harmonised by successful collaboration.

The Commission beg the Ministry of Transport to consider certain aspects of the proposed bridge . . . which does not appear to be designed in relation to the river and the town of Marlow. It is prepared in relation to the road rather than the township, doubtless for the convenience of through traffic.

The present bridge is in effect the gateway of the town, a terminal point as well as the approach. It is possible that a reduction of speed caused by its narrowness at this point may not be wholly disadvantageous, as the main street of the town, with its abrupt bifurcation at the northerly end, is ill-suited to swift driving. The proposed bridge will impose a new scale upon the little township, which is notable for its domestic street architecture dating from the 17th and 18th centuries. Moreover it will injure a well-known section of river scenery, which is in fact an exceptionally unspoilt reach of the Thames. The view from the water thoroughfare should have been considered, for it is as important as that from the roadway.

"Generally speaking it is undesirable that concrete (which tends to shabbiness and frequently to surface decay) should attempt to imitate masonry. Forms derived from masonry construction seldom look well when copied in a plastic substance. Consequently an attempt to beautify the proposed bridge by the addition of architectural details borrowed from masonry is wrong in principle, and in practice will prove a failure. For example the vertical members, by which the roadway is suspended from the main segmental girder, are treated like stone pillars, giving the false impression that they support the girder instead of being what in fact they are, suspension-rods carrying the roadway. The cast balustrade is also adapted from stone models. The lamps, cornices, and enrichments seem inappropriate to the situation.

"So far from criticising reinforced concrete as a

*Published by H.M. Stationery Office, 25 November, 1928.

bridge-building material, the Commission are acquainted with most successful examples of its employment for this purpose. It is a valuable method of dealing with wide spans, but it should be treated honestly, telling the story of its structural purpose, without any attempt to conceal that purpose by the addition of irrelevant architectural detail borrowed from a totally different material. Otherwise the outcome is unsatisfactory, and decoration is of small value where the crucial factor at issue is the main design rather than its embellishment.

"The form of the Marlow design depends upon its construction in concrete, and when detailed to look like stone the qualities of both types are lost. The result will be a bridge invested with impossible architectural forms, while at the same time the engineering lines, which in themselves should be simple and dignified, are obscured and indeed falsified with a fictitious semblance of architecture."

The by-pass solution would seem inapplicable to Marlow, but elsewhere it can frequently be employed as an alternative to destruction, where the architectural merits of a bridge are such that its removal would impair the local scenery and environment.

We may add that the famous suspension-bridge at Budapest erected in 1839 by W. Tierney Clark, F.R.S. (who built the Marlow bridge) was recently repaired at great cost as a monument, both scientific and artistic, of first-class importance.

The design for the new bridge at Richmond was unsuitable in character for its site and environment. The bridge has emphatic and strongly marked features, namely, four towers 70 feet high; the flanking walls enclosing the roadways adjacent to these towers rise to a height of some twenty feet above the road level. Moreover there are four prominent staircases leading to and from the towpaths.

Apart from the abstract merits of the architectural scheme, the Royal Commission primarily considered the bridge in relation to its setting and environment, and they were impelled to the conclusion that the structure would be inappropriate to this reach of the Thames. The river scenery of Richmond on the one side, and of the historic Deer Park on the other, is calm and essentially English in character. The slow moving stream and the widespread expanse of meadowland studded with fine trees, combine to form a peaceful landscape with which the bridge should harmonise. Its dramatic and fortified appearance seems so foreign to its quiet surroundings and presents so striking a contrast to the neighbourhood, that the Royal Commission accordingly expressed a hope that the architect might be consulted as to simplifying some of the more outstanding features of the project.

The Commission feel strongly that this problem of setting and environment is of the first importance.

In one case the proposal to substitute a new bridge for an old one had reached the stage of a commission being offered to an architect who happened to be a member of the Royal Fine Art Commission. It occurs from time to time that the Commission have to express their views on schemes prepared by one of their own members; and in this case (the Commissioner in question having retired during the discussion), the Commission felt that the new bridge raised problems of setting and environment such that the scheme should not proceed. It was accordingly abandoned.

The design of the proposed bridge at St. Paul's gave rise to analogous difficulties. Our first report, issued in July, 1924, expressed grave anxiety as to the danger to the Cathedral fabric arising from the vibration of heavy motor traffic. Since that date the scheme as a whole was condemned by the Royal Commission on Cross-River Traffic in London. A revised scheme was recently produced which increased the number of arches and bridges crossing thoroughfares, including a new viaduct over Cannon Street. We are of opinion that quite apart from any danger to St. Paul's, such proposals would seriously interfere with the setting and environment of the Cathedral, especially as a new roadway along the north side of St. Paul's would in course of time become inevitable. We learn with satisfaction that this scheme has been rejected by the Court of Common Council.

It would appear that architectural opinion had not been sufficiently consulted in designing the long northerly approaches to the projected bridge—approaches which involved problems of aesthetic and architectural moment. We think it most important that in all such cases the association of architect and engineer should be complete. Towards the end of the 18th century the use of iron in bridge-building introduced a new factor, and the design of important bridges passed into the hands of engineers, most of whom like Rennie, were guided by the fine traditions of 18th century design. Later on, however, the steady advance in technical efficiency was not accompanied by the earlier appreciation of the artistic possibilities of great bridges as great public monuments. Many examples could be quoted which show a total misconception of monumental design; and indeed the engineer's training concentrates his mind on the literal facts of construction, whereas the architect is trained to apply his imagination to those facts, and to translate them into terms of æsthetic value. He has to consider mass, silhouette, proportion, and to study how best to draw essential qualities from his material, whether it be brick, stone, steel or reinforced concrete. The choice of colour and material, the relevance of the bridge to the immediate neighbourhood and its character in relation to the general surroundings, all demand careful study on the site before reaching a

decision as to design, quite apart from the constructional question.

Collaboration between architect and engineer is therefore most necessary and should be undertaken at the outset. The Public Authority in consultation with its traffic and engineering experts determines the direction, breadth and gradients of a bridge together with its approaches, but the function of the architect is to consider the data for preparing a design, which in turn is subject to modification from the point of

view of cost, construction and practical use. All such matters should be adjusted between the architect and engineer while the scheme and process of construction are being evolved. The closer the co-operation the more effective will be the outcome. If we are correct in thinking that the erection of new bridges and the enlargement of existing bridges is likely to continue, it is very important that responsible authorities should devote care to studying the procedure best calculated to obtain satisfactory results.

The Story of the Temple*

BY SIR BANISTER FLETCHER, F.S.A.

The Temple, with its unique old church and historic precincts, has always had a fascination for me, as a Barrister of the Honorable Society of the Inner Temple and also because I am privileged to have my professional chambers in King's Bench Walk. So I welcome the little brochure by Marjorie Bowen, because even by reason of its sketchiness, it will make the atmosphere of the unique Temple enclosure appeal to many who otherwise might be unconscious of its quiet charm or only know of some of its hidden corners as the background of characters in the novels of Dickens.

The author strikes the keynote of this, as of other peculiarly English institutions, when she writes of the Temple as possessing that indefinable charm which hangs about any building or group of buildings which has grown gradually from century to century, the passing years "enriching—not despoiling it." In this way you have history in stone laid out before you in the growth and additions to the group of Church and Inns of Court, long collectively known as "The Temple." There is a certain magic in that name which has laid its charm on many great men in all walks of life. It forms, as the author suggests, a Legal University in the heart of London. How did it come to have its name The Temple? Here begins our history lesson, for we are taken back to the reign of Henry I. and the capture of Jerusalem by Crusaders, which gave the Holy Sepulchre into Christian keeping. Then it was that Hugh de Paganis and other Crusaders imposed upon themselves as laymen the vows of St. Augustine, and formed a bodyguard for the roads to the Holy City. For this they were lodged by the then King of Jerusalem in "The Temple of Solomon on Mount Moriah," and received the title of Knights Templars. From their tunic with the red cross they were known as the Red Cross Knights, and had those qualities characteristic of the "Gentle Knight" in Spenser's "Faerie Queene." These Knights were both

noble and popular, and among the monarchs who conferred benefits on them was our King Henry I., who gave them the bit of City land as well as grants in Cressing and Witham. In the City of London the tradition ran that they had an orchard, probably Lincoln's Inn Fields, and that there they built a Round Church. Moving south to the River Thames, they again built a Round Church, which is the present beautiful Temple Church which stood between the two cities of London and West Minster. The Order flourished and increased in importance to such an extent that it became suspect of the Pope and fell under persecution, and was finally abolished. It is interesting to dwell on this part of the little book, because the origins of everything are always rather intriguing; the enquiring mind wants to probe to the roots of things and the answer to enquiries is supplied by our author. To their Order succeeded the Knights Hospitallers, who held the Temple Buildings with varying certainty of tenure till the Crown took possession in 1540. Next the buildings passed to the two Law Societies, the Inner and Middle Temple who, we are told, "were alike equal in antiquity, honour, and estimation."

These Temple Buildings now form part of the four Inns of Court which are survivals of a mediæval Legal University which protected the interests of the members and trained students for the Law.

With regard to the old Church, with its round and its oblong eastern end, it is interesting to note that the quaint porch is said to be the only remaining part of the one-time cloisters.

The Round Church is the centre of attraction, and the oblong part was consecrated in 1240; it had its vicissitudes of whitewashing, repairing and painting, and in 1827 Sir Robert Smirke took a hand and cleared away the remains of the delicate little St. Anne's Chapel, between the Round and the choir. The nine mail-clad recumbent figures in the Round cannot be proved to be Crusaders, but are certainly nobles, while many Renaissance mural tablets have been removed to the triforium, and so much history, as well as interesting

* *The Story of the Temple and Its Associations.* By Marjorie Bowen, F.R.S.Lit., F.R.Hist.Soc. 8" Lond., 1928. [The Griffen Press.] 3s. 6d.

heraldic art connected with the church is at present lost to view. We hope that soon they may be reinstated in the main body of the church. Then we may renew acquaintance with Oliver Goldsmith, as well as Edmund Plowden, and John Selden, Treasurers of the Middle and Inner Temples. Pursuing the kindly guidance of the author, we wander through the haunts of ancient and modern law, and follow the footsteps of great men of many walks in life. One of the first of the names that occurs to us is that of Charles Lamb, who has left a record of life as he saw it there in "The Old Benchers of the Inner Temple." Behind the beautiful portal of No. 5 King's Bench Walk lived the great Lord Mansfield. Edward Law, Lord Ellenborough, George Canning, Samuel Rogers, Thackeray, Judge Jeffreys, Dr. Johnson and the faithful Boswell, the unhappy William Cowper, Sir Edmund Coke, Hallam the historian, and even Lord Tennyson, besides many others, all have left their memories in the Inner Temple; while Oliver Goldsmith and a host of famous men still haunt the precincts of the Middle Temple.

There are two pleasant pen and ink sketches of Fountain Court with Middle Temple Hall and of the Wren Doorway in Lamb's Building by H. P. Cart de Lafontaine.

As I have said, here is a welcome little book on The Temple, with suggestive notes on its origin, history, church, buildings, gardens, inmates and visitors, and it has the greater value and attraction as being written by an author who has already dealt extensively with various aspects of the history of England and other countries. She tells us that the bibliography of the Temple and its famous men would fill a volume; but it would be more helpful if she gave even a short list of the main authorities she has herself consulted. Then those who would might follow her example with profit and fill in for themselves the interesting sketch that she has given us. So we recommend the tale of The Temple to all who are interested in this haunt of so many great Englishmen and this history in stone of many centuries. We reiterate the words of Lamb's greeting to The Inner Temple. "So may the Winged-horse, your ancient badge and cognizance, still flourish."

Reviews

MINISTRY OF HEALTH. *Ninth Annual Report, 1927-28.* [Printed and Published by His Majesty's Stationery Office.] 5s.

The Report of the Minister of Health for 1927-8 touches many matters with which architects are concerned: notably Housing, Hospitals and Town Planning. As regards the housing subsidy, the evidence continues to bear out the fact that the cost of house building falls with the reduction of the subsidy. In the early part of the year under review the number of new houses fell off considerably because a great effort had been made in the summer of 1927 to complete houses in large numbers before the end of September, when the amount of the subsidy was re-

duced. The number of houses under construction at the end of March, 1928, was 55,258, and of these about one-third were the subject of private enterprise and two-thirds were the work of public authorities.

In the matter of hospitals and similar institutions, the outstanding points of interest are the increase in the number of such buildings required, and the advance in the standard of construction and equipment. With the increase of diseases that become notifiable comes the increase of facilities for dealing with them. In two London boroughs, Paddington and Kensington, acute rheumatism in children under sixteen has become notifiable, and plans have now been approved for an Asylums Board Hospital which will provide accommodation for about 350 cases of rheumatism in children. Further, the Red Cross Society has launched a public appeal for funds to meet the cost of establishing in London an experimental clinic for the study and treatment of rheumatism. Maternity and Child Welfare Centres show an increase of 107 during the year. Dental work, artificial light treatment, and orthopaedic treatment are receiving more and more attention, and Day Nurseries seem to show a constant demand for better premises and facilities. As a comment on the advance in the standard of buildings, it is pointed out that whereas in 1875 the cost per bed of a Poor Law infirmary was not more than £123, it may now be as much as £650 per bed. The accommodation now required includes operating theatres and provision for various other special services, and in fact it bears comparison with that in the large voluntary hospitals.

The other department of the work of the Ministry which especially concerns architects is Town Planning, together with the kindred matter of the preservation of amenity in town and country. It is clear on the one hand that activity in such matters is increasing rapidly and that on the other hand the difficulties which have stood in the way in the past are being met by degrees, and especially by arrangements being discussed with the land owners at the outset instead of after schemes have been prepared. An obvious drawback to schemes dealing with future development of land is the impossibility of forecasting the character and extent of growth. If limitations upon the use of land are imposed they must be adhered to in order to give security to the building owner, but the report points out how undeveloped land may be dealt with broadly in the first instance, and the details as to the use of particular portions left to be filled in when some indication of the requirements of the district has appeared.

Especial attention is called to the value of such voluntary associations as the Oxford Preservation Trust, formed with the object of safeguarding the amenities of the City, or the Thames Valley Branch of the C.P.R.E. This latter organisation consists of representatives of a vast number of bodies, including two Universities, Town Planning Authorities, the Thames Conservancy, a Farmers' Union, a Builders' Association, and so forth.

By no means the least interesting part of the Report is that referring to smoke abatement, and it appears that in many places bye-laws bearing on this matter have been put into operation.

ARTHUR KEEN [F.].

More Ancient Building Terms*

BY BEATRICE SAXON SNELL, M.A.

N.E.D. = Murray's New English Dictionary.
 Hope = Sir W. H. St. John Hope, *Windsor Castle*.
 N.Fr. = Norman-French.

The majority of these terms are taken from Sir W. H. St. John Hope's *Windsor Castle*, which is a perfect treasure-house of old building records. The very interesting collection of names of Cotswold roofing slates was sent to me by Mr. Thomas Falconer, F.R.I.B.A. I am most grateful for these and for the helpful information and criticism given me by Mr. W. H. Hopkins, A.R.I.B.A., and shall be very glad to receive any further comments on this or the previous collection of words.

Bandellog. A form of tie-beam, probably very rough, mentioned in *York Fabric Rolls* (Surtees Society), 1433, along with "iij balkes, iij stanzons," and "iij soles" (Sills). Not recorded by N.E.D.

Betty. To the list of tools with personal names under the heading DAWKIN in my previous article may be added BETTY, a crowbar. (Lockwood's Dictionary of Mechanical and Engineering terms.)

Bind. J. Stephens, in his *History of St. Mary Bourne* p. 242, quotes the following from Parish A/cs of 1676: "March 9. For a stone wall bound £3 3s. 7d." He adds: "As the wall in front of the church is of stone, capped with heavy blocks of sandstone, there is little doubt that the entry refers to it." N.E.D. has no record of this use of the verb "to bind."

Board, verb. In 1363 at Windsor (*Hope I*, 208), a payment was made to "eidem Johanni pro bordicione camere Regine iuxta capellam." This is a good example of a word of Anglo-Saxon origin appearing in a Latinized form long before there is any record of it in an English document. N.E.D. has no record of the verb before the sixteenth century. A slightly earlier example is the verb PIN, which occurs 1343-4 (*Hope I*, 121). "In stipendiis Johannis de Rikemerworth cementarii et garcionis sui pynnancium circa mantellum alte Turris. . . . In stipendiis Johannis le mason et garcionis sui pinnancium subtus mantellum alte Turris et fundamentum stabuli Regine in media balliva."

Border Stone. 1533 (*Hope I*, 250) "'Border stone' for chimneys." 1534-5, *Ibid.* I, 264.) "To Gabreell Goldam of london ffor viij ffoote of border stone of hym bought and spent in the said Chymney."

Gwilt's *Architectural Glossary* (1876) gives BORDER, a piece of wood put round the upper edges of anything either for use or ornament. Such are the three pieces of wood . . . which are mitred together around the slab of a chimney." (N.B.—N.E.D. has no record of slab in this sense, though it occurs in Knight's *Dictionary of Mechanics* under the heading CHIMNEY.)

Evidently at this period chimney borders were carried out in stone.

Brace. The earliest record of the technical use of this word given by N.E.D. is 1530. But in 1354-5 in the Windsor Castle A/cs (*Hope I*, 167) we find a payment of 20s. 8d. for "iij ffothbraces cum ij colariis de eneo emptis pro dictis molendiniis ibidem ponderantibus ^{xx} ij lb." _{iiij}

Perhaps these "foot-braces" were to support the block in which the lower portion of the mill-spindle—the "foot-stalk"—rested.

*Some Ancient Building Terms, by Miss Snell, was published in the R.I.B.A. JOURNAL of 18 December 1926.

In 1406-7 we get the usual building sense, a payment being made for "somerijs, gistes (joists), et Brases ejusdem Camere inde supportande."

Breasting. There is a payment in the Windsor Castle A/cs of 1533 (*Hope I*, 253) for "brestyng" two chimneys, but N.E.D. has no record of this usage of the verb "to breast."

Capier, Gapier or Clapper Windows. There are three entries in the Windsor Castle A/cs relating to these.

(1) 1354-5 (p. 168). "Pro vitracione fenestrarum super summitatem Camerarum Canonicorum vocaturum capyers . . . super capiers pro cameris Canonicorum."

(2) 1392-4 (p. 225). "Cum factura cujusdam fenestre vocate Gapier pro decano et collegii divina celebrandis."

(3) 1393-4 (p. 228). A payment was made to Henry the Smith of Eton for the ironwork for a clapier on the north part of the hall, weighing 9 lb.

Sir W. H. St. John Hope comments on the above entries (1) (p. 222). "The most interesting point in connexion with this (a temporary chapel set up in the great hall) is 'the making of a certain window called gapier,' since there can be little doubt that the purpose of this opening was the same as the so-called 'low-side' windows, so frequently found in English churches and chapels. A further entry (3), relating apparently to this particular example, occurs in the account roll of the precentor of the College. A temporary chapel seems to have been set up in the dais or north end of the hall, which was the most convenient place for it, and the 'gapier' or 'clapier' window would look out towards Eton into the narrow space then existing between the hall gable and the castle wall."

(2) (p. 225). "This gapier window, if it were a 'lowside' window, was certainly not for the use of lepers or the hearing of confessions, but would have served for ringing the sacring bell at it, in order to make known to any soldiers on the wall or men engaged about the hall the moment of the elevation at Mass."

I believe capier to be the correct form. It is from N.Fr. capier, Fr. chapier, both derived from Late Latin caparius, "Cantor qui fert Cappam (cape or cope) in Ecclesiam." (Ducange, *Lexicon of Medieval Latin*.) The capier would thus be a "cantor's window," and perhaps it had a "cape" or "cope-ing" above it.

The form clapper may simply be a miswriting, or perhaps a misunderstanding of the term on account of the usage of the window which Sir W. H. St. John Hope has described. A "clapper" is a rattle used to summon people to church on the last three days of Holy Week (N.E.D.). E.g., 1869, *Life of Margaret Hallahan*, p. 541. "Notice of any sister being in her agony is given by a particular clapper only used at such times, and during those days in Holy Week when the bells are silent." It was sometimes called a "clap"—e.g., in Peacock's *Lincolnshire Church Furniture* there is a mention, in 1566, of "A sacreing bell broken by

mt. harbotell; two *clappes* broken by mt. vicar." The verb "clap" was formerly applied to the tinkling of a bell, and is so used in 1440 in *Promptorium Parvulorum*.

As to the form *gapier*, Knight, in his *Dictionary of Mechanics* I, 9421, gives GAP-WINDOW, "a long and narrow window," and the shape may have suggested this version of the word.

Chinch. This is a Kentish form of the word CHINK, to fill in the interstices of brick or wood. CHINK in this sense is not noted by N.E.D. till 1845 and CHINCH is not noted at all. It occurs over two hundred years earlier in the *Churchwardens' Ac/s of Strood*, 1620. "Item paid to John Bunce for one daies work about the *Chinching* of the leads and the vestry."

Clerk of Works. In the Middle Ages most of the responsible positions which involved written reports or accounts were held by clerks—i.e., clerics. Supervising and authorising building operations and repairs was one such position—e.g., at Windsor in 1165 the head supervisor was "Master Geoffrey FitzDurand *capellanus*"; in 1195 "Martin *clericus*"; in 1237 "John *frater*," and so on. When these tasks passed into the hands of laymen the title "clerk" was often retained. The earliest instance of our modern "Clerk-of-Works" occurs in 1663 in Gerbier's *Counsel*. "A Clerk of the Works must be vers'd in the prizes (prices) of materials and the rates of all things belonging to the building."

Clore. verb Not recorded by N.E.D. The earliest reference is 1352, (*Hope* I, 163). "Willelmo Hamme cum vij sociis suis vitriariis depictantibus conjungentibus *clorantibus* vitrum pro dictis fenestris." Mention is also made (I, 126) of "xj vitriariis vocatis *clorours* et x joyours." There is a gap of over three centuries, and then we find in Randle Holme's *Academy of Armory*, 1688, III, xix, 386. "*Cloreing*, Setting or Leading is the making of the cut glass up into payns . . . Joynt is the crossing of the lead at every corner of the glass in a payn."

It is difficult to find a derivation for this word. French *clorre* "to enclose," which suits the meaning admirably, is impossible philologically, because the derivatives ought to be "closant" and "closeur;" unless we suppose that the infinitive *clorre* from Latin *claudere* was re-Latinised into a verb of the first conjugation *clorare*, and the derivatives formed from this. The true explanation is probably a good deal less far-fetched.

Clout-Nails. These are mentioned in the Windsor Castle Records for 1356-7. (*Hope* I, 213.) N.E.D. does not mention them till 1463, and says they are "a flat-headed nail for fastening a 'wain-clout' on an axle." Knight, in his *Dictionary of Mechanics*, adds that they have a "fine point, flat circular head and round shank."

Coak. N.E.D. defines a *coak* as "a small triangular or square piece of brass inserted into the wooden sheave of a block to afford a stronger socket for the pin. Sometimes more loosely applied, to the circular 'bush' used with a metal sheave. Also called *cock*." The derivation is conjectured to be from Old N.Fr. *coque*=Fr. *coche*, notch, but I have two fifteenth century quotations which put this out of the question.

(a) 1485, *Naval Ac/s Henry VII* (1896), p. 37. "Poles (pulleys) of iij sheaves and *colkes* of brasse."

(b) 1495, *Ibid.*, 204. "Polices with iij *cothes* of brass."

Knight, in his *Dictionary of Mechanics*, gives the more familiar spelling under the article BLOCK. "The sheave . . . has a bushing called a *coak* around the pintle hole."

Now *colk* is "the core of an apple or similar fruit; of a horn, heart of wood or the like" (N.E.D.: first quotation 1340), and *coak* is a dialect form of this word, exactly as we say

"yolk" for the *yolk* of an egg; evidently the technical word is derived from it.

Cole. There is no record in N.E.D. of this word, which is from Fr. *colle*, Latin *colla*, "glue." There are two medieval references to it:

(a) *Hope*, I, 209. 1365-6. "In diversis patches emptis pro *Cole* inde faciundo propictoribus."

(b) Lanfranc's *Cirurgieon* 135, about 1400. "As it were two bordis weren ioyned togidere with *cole* or with glu."

The reference to "patches" in the first quotation shows that "cole" was skin-glue, made of scraps of leather such as would be used to patch shoes. N.E.D. has no reference to "patch" in this sense. These odd scraps of leather were sometimes called "shreds"; e.g., in the *Churchwardens' Ac/s of Strood*, 1585, "Laide oute for a bushell of *shread* to make syes (size)."

Collar. 1354-5. For quotation see under BRACE supra. There is no reference in N.E.D. to the word in this technical sense till 1703.

Comb. 1395-6 (*Hope* I, 226). "Emendacione unius rote et cijusdam *combe* supra fonte *Coquine*." This was obviously a roofed well, and the "comb" would be the "crest" of the roof. N.E.D. has no record of this use of "comb" till 1870.

Cotton Candles. 1534-5. (*Hope* I, 264.) "Ij ll of *Cotten Candell* ffor the plommers to sawder with." A "cotton candle" is one with a cotton wick; candles being also made with wicks of flax and rush, e.g., *Promptorium Parvulorum*, c. 1440, translates *papyrus* as "candel-rysche." There is no record of this kind of candle being used before the sixteenth century at present; N.E.D.'s earliest reference is 1587.

Cross Gemew. 1532-3. (*Hope* I, 263.) "ffor a cople of *Crosse Jamewis* tynned ffor a new dore in the Kyngs stole-chambre." A *Jamew* or *Gemew* (from O.Fr. *gemeaus*, twins) was originally any joint or fastening consisting of two parts fitting into each other, and then came to mean simply "a hinge." A *Cross Gemew* is the same as a *Cross Garnet*, which is "a species of hinge formed thus —, with the vertical part fastened to the style or jamb of the doorcase and the horizontal part to the door or shutter." (Gwilt, *Architectural Glossary*.)

Curb of Lead. *Hope* I, 236, c. 1460. "pro cariagio j *Corbe* pro predicto lede a Bray usque Wyndesore." N.E.D. gives several more references to "curbs of lead," and says that the meaning is uncertain; e.g. 1495, *Will of Sir R. Porter* (Somerset House), "I bequeith to the church of Conway a furnesse and a *Curbe of lede* to hill (roof) the church with." Also 1527, *Lancashire Wills* (Chetham Society), "Item I beqweth a grett pott off brasse and my *corbes of lyede*." Knight, in his *Dictionary of Mechanics*, says that a curb is "a boarded structure to contain concrete, which hardens and acts as a pier or foundation." It is possible, therefore that the original meaning was "mould"—cf. *Cely Papers*, 1485. "A mowlde of stone to cast leyd in." The term "curb" would later be applied to the amount of lead which filled it, just as we speak of a "mould," meaning a pudding shaped in a mould.

Dead Buttress, Dead Wall. A buttress or wall made purely for ornament. They are mentioned in the Windsor Castle *Ac/s* for 1574. (*Hope* I, 270.) "Also making another wall called 'a greate *dead wall*' of ashlar and with copings on the other side, leading and running from the large squared tower across the bridge . . . towards the little park . . . and making a seat in the wall . . . and a certain ornament near the same seat called a finial standing upon 'lez *dead buttresses*.'" There is no record of these terms in N.E.D.

Double Door. The first reference to this word given by N.E.D. is 1618, *Sylvester, Poems*, "That faire double-doored port." But in 1537 at Windsor "a new Dobbell Dore" was made for "the preson in the Rubbysh Gate." (*Hope I*, 251.) This door was fastened with "a new Doble hopped (hooped) locke." There were a good deal of "double locks" at Windsor at this time; e.g., in 1532-3 three shillings and fourpence was paid "for a doble lock with a pypped (pipe) key ffor the dore where the Kynges Juelles lye." (A "pipe-key" is a key with a pipe or hollow barrel which fits on a pintle in the lock. N.E.D.) The King's Pallet Chamber (bedroom) also had a "dooble hooped locke," and in 1534-5 a "double hooped stocke locke" was "sett uppon the Colege garden dore to save the Kynges plaet locke oon to the begynnyng of somere." A stock-lock is a lock enclosed in a wooden case, usually fitted on an outer door, and occurs as early as 1365, but N.E.D. gives no reference to or explanation of "double-hooped."

N.E.D. defines a double door as "a door consisting of two leaves opening in the centre; also two doors one behind the other, closing the same opening." The prison door would probably be of the latter variety; the former was known as a "leaved door" at this period; e.g., 1534-5 (*Hope I*, 264), "making a new leved Dore and a Wykett in the same ffor the great kechyn."

Dubbers. In James Nedam's Pay-Book for the year 1534-5 (*Hope I*, 264) is a payment of five shillings "ffor one loode off Elmyntymbre bought and spent uppon dubbers ffor the barrell off the well ffor the Cheyne to Rowle upon." N.E.D. has no record of this word. "Dubbing-out" is "the bringing of an uneven surface in a wall to a plane by pieces of tile, slate or the like before it is plastered over" (*Gwilt, Architectural Glossary*), and a "dubber" was formerly a mender of old clothes (N.E.D. 1225-6). Possibly, therefore, the timber was used for making good the surface of the barrel, so that the hook attached to the chain did not catch in any faults.

Dubbing—not mentioned by N.E.D. till 1823—occurs in 1478-9 at Windsor (*Hope I*, 239), when £8 was paid for "le Dubhyng" of a roof.

Elmen (Elm) Timber. The only early reference to elm timber given by N.E.D. is 1466. But in 1439-40 in the Windsor Castle A/cs (*Hope I*, 229) 460 feet of "elmenbordres" at 2/2 per hundred were bought. In 1523-4 "seasoned Elmyntymbre" was used for "making of hoddres, bossis and whelebarowes to serve the brykylayers." (*Hope I*, 264.) Its use for "dubbers," whatever they may be, has been noted above. In 1532 a payment was made to "John Crannold off the Wyk ffor iij lode off Elme ffor to make ladders Rolles levers and Commaunders" (large mallets which command rather than persuade the piles they drive home). "Elmyntymbre" was also used in 1541 "in making of Joynd stollles and oither necesssrijs for ye Kyngs workes."

Fane=Vane, weathercock. These were made of the mixed metal latten during the Middle Ages; e.g., 1358-60 in the Windsor Castle A/cs (*Hope I*, 214), "j fane de latoun." N.E.D.'s first reference is in 1386 from Chaucer's *Clerk's Tale*, 940. "O stormy poeple . . . ever untrew . . . and chaungyng as a fane"—and the metaphorical usage shows that the word must have been in the language some time.

Fireball. In 1574 at Windsor orders were given to make "a certain ornament called a finial standing upon 'lez dead buttresses' (vide supra), and with a certain ball on top called 'a fyre ball.'" (*Hope I*, 270.) A fireball was a kind of bomb used at this period, though N.E.D. does not give the word till twenty years later and has no record of it in this architectural sense.

Flower, verb. This word was specially applied to the stucco ornamentation resembling foliage that was popular during the fifteenth and early sixteenth century; e.g., in the Windsor Castle A/cs for 1533 we have "Not only Repayryng and mendyng Every flower between the watchyng Chambre and the palyat (bed) Chambre with playster off paris but also the same paliat Chambre fflowrede with plaster." Later in the century the basis of stucco designs was interlacing geometrical figures, but these were often ornamented with flowers and leaves at the junctions and the term "flower" persisted; e.g., about 1547 in a letter from Sir William Cavendish and his wife to Sir John Thynne, quoted in Gilbert Millar's *Plastering, Plain and Decorative*, p. 15, there is mention of "a cunning Playsterer" who had "flowered the Hall at Longleat." N.E.D.'s first quotation for the verb in its technical sense is 1577, when the word is used metaphorically (and a grim enough metaphor, too!). "He flowered the top of the castell of Dublin with the archrebel's head."

Folding Windows. In 1533 at Windsor there is mention of "ffollyng wyndowis off wainscott within the Arbour House, as also Ryders as well ffore the said wyndowis off waynscott." (*Hope I*, 249.) I think this means folding windows, as N.E.D. gives "falling door" as a synonym of "folding door." (1753, Hanway, *Travels I*, ii, xxxiv, 231. "The Divan or open hall is in the centre and shuts in with falling doors.") N.E.D.'s first quotation for "folding door" is 1611, and it has no record of the term "folding window."

Fretting Work. A fret in Heraldry was a figure resembling two crossed sticks interlaced with a lozenge-shaped figure called a masecle. Hence "fret" was applied to the stucco ceiling ornament consisting of interlaced geometrical figures which came into fashion during the Tudor period. It is so used in the Windsor Castle A/cs for 1581 (*Hope I*, 276)—"certain plaster work called ffittinge worke." But a little later the term seems to be used loosely to cover any sort of ornament, e.g., N.E.D.'s first quotation of 1601, "Plastre serveth . . . to make little images in fretwork to set forth houses," and Shakespeare's *Cymbeline*, II, iv, 88. "The Roofe o'th Chamber With golden Cherubins is fretted."

Glue. The earliest reference to glue used for building purposes occurs 1350 in the Windsor Castle A/cs (*Hope I*, 161). "In cvj stokkshsodes emptis pro glu inde faciendo pro stallis capelle predicta iij.sjd." This is fish-glue, but the word in French meant "bird-lime," and is so used in a sermon of Wyclif's, c. 1380. "Flee we her (their) sentence as heresie or fendis (fiends) glewe." Wyclif also uses the word with the meaning "pitch" in his translation of *Genesis*, VI, 14. "Withynne and with oute thow shalt digten it (the ark) with glew." N.E.D.'s first building reference is 1400. (Vide supra under COLE.)

Gobbet. N.E.D. notes this word as applied to iron—e.g., 1382, Wyclif's translation of *Ecclesiasticus*, xxii, 15. "Grauel and salt and a gobet of iron is easier to bear than a man without understanding"—but not as applied to stone. In the Windsor Castle A/cs for 1344 there are several entries relating to "gobbets" of stone, e.g., "pro cvj gobet de Caine (stone from Caen) emptis, lxij s." This looks as if "gobbet" was a fixed measure of some sort at this period, unless it simply means a large rough lump of unhewn stone. There is a kind of ironstone called "gubbin," and "gub" is still dialect for a rough lump of anything—e.g., Kipling, *Simple Simon*, "Him an' Moon hove the pudden at me on the bowsprit gub by gub, something cruel hard!"

Heathstone. See my first article. Mr. W. B. Hopkins wrote to me, "I think this means granite boulders on the surface. These are not considered so good for building as granite which is quarried." A further reference occurs at Windsor in 1536. (*Hope I*, 264), "for xvj Tonne of hard heth stone

for . . . worke . . . done by . . . Rowgh masons. For vij gaddes of steyll spent on the stelyng of wegges to cleaffe heth stone."

Hoop-shide. 1362-3, Windsor Castle A/cs (*Hope* I, 186). "The purchases under the head of scaffolding included 30 *hopeshides* for making hoops." N.E.D. does not note this compound. A *shide* is "a piece of wood split off from timber, especially such a piece used in building a fire." The Anglo-Saxons used it to translate Latin *scindula*, our "shingle." In Langland's *Piers Plowman* Noah is bidden shape "a ship of *schides* and Bordes." By 1600 the "shide" was an exact measurement, i.e., half a cubic foot of timber. In 1450 Godstow Registers give "shideyard" where we should say "timberyard." It is connected with the verb *shed*, which originally meant "to separate," and is a parallel formation to such words as CLEFT, DELF, HAG, GROFT, and FEL.L. (See GROFT, previous article.)

Latten Nails. N.E.D. has no record of these, which are found at Windsor in 1356-7 (*Hope* I, 213). "C latonenail." *Latten* was a mixed metal closely resembling brass. It was used during the Middle Ages for guns, washing and other vessels, ornamenting doors, clocks, candlesticks, window fastenings, weathercocks, (see FANE), etc. *Revelations* I, 15, was translated about 1340 by Richard Rolle as "His fete er like latoun bright." There is a seventeenth century pun on the word, alleged to be a saying of Shakespeare's: "I faith, Ben, I'll e'en give him a douzen good Lattin spoones, and thou shalt translate them."

Lode-Ropes. 1353-4, Windsor Castle A/cs (*Hope* I, 172). "Et in ij *loderopes* et j corda pro campana emptis." N.E.D. has no record of this word. It means "leading-ropes;" cf. with GUY (=guide) ROPES in my previous article.

Lollers. 1338, in Sir N. H. Nicholas's *History of the Navy*, II, 476. "cc waynscots . . . ij novexl *lollers*, v. regaldes." N.E.D. has no record. They must be a beam of the type represented by joists, liggers or dormants.

Moulder. This word is applied to a maker of tiles in 1354, (*Hope* I, 166). "Symoni *Moldere* de Chalfhonte pro x M' teguli emptis ijs iiij." N.E.D. only records MOULDER, "one who moulds dough or bread" in 1440, and "one who moulds clay into bricks" does not occur till 1599.

Orange Board. This interesting word was sent to me from Devonshire by Mr G. F. Abell. He says it is "The Tilting Board used above wood window-frames in order to carry rain clear of the frame—usually covered with lead or slate. It takes the place of the label of stonework." I think *orange* must be a corruption of Fr. *orage*=storm or weather-board. N.E.D. has no record of the word.

Osiars. In the fourteenth century these were sold in "bunches." A "bunch" of reeds of any kind is a definite quantity; we cannot tell how much it was in 1351, but in 1863 in Cambridgeshire it was a bundle 45 inches round at the band—probably a traditional measurement. The entry in the Windsor Castle A/cs (*Hope* I, 164) reads "In x bunchis de *Osiars* emptis pro reparacione Corbelli Camerarium Custodis Collegis ijs vjd," so they were 3d. a bunch. Sir W. St. John Hope conjectures that they were used for "some basket," but if the amount sold in 1863 as a bunch is any guide, the quantity seems excessive. Perhaps they were used to form a protection for half-finished or decayed stonework, e.g., in 1350 there is a payment to "Johanni atte Hacche pro ix carretatis de heth (heath) emptis, ad cooperandos muros," and Sir W. St. John Hope thinks this was used for protecting half-built walls during the cold weather.

Pace. This word, from Fr. *pas*, a step in walking, is first recorded about 1300, with the meaning step of a stair. It died out of common use during the seventeenth century,

together with the synonym *grece* from O.Fr. *grez*, leaving the Anglo-Saxon *step* in possession of the field. The first mention of stones for "paces" occurs in the Windsor Castle A/cs for 1350-1 (*Hope* I, 137), when 150 stones "de *paas*" were bought. N.E.D.'s first record of stone for this purpose is in 1535, *Hampton Court A/cs*, "104 fote of hardston rough t *pase*."

Pargetting. This word, first recorded during the fourteenth century (*Hope* I, 122, 1344-5, "In stipendio Walteri le Proute facientis Beemfullyng et *Parjettyng* in dicto stabulo"), was originally a synonym for the older "daubing," and only later came to signify the "plaster work decorated by means of stamps" mentioned by Gilbert Millar (*Plastering, Plain and Decorative*, p. 28). This is clearly shown by the following passages from Wyclif's Bible. His version of Ezekiel XIII, 1 (written 1382) runs, "And he biltide a wal, forsothe thei dawbeden (marginal gloss *pargetiden*) it withouten chaffis." For verse 12 of the same chapter the 1382 version gives, "Where is the dawbyng which ye *pargetiden*?" but in the revised version of 1388 "dawbyng" is replaced by "*pargetyng*"—a rather unhappy second thought. A quaint early reference occurs in Trevisa's translation of Bartholomeus Anglicus, made in 1398. "Beene (bees) . . . *pergetteth* the rof (roof) of her huyues (their hives) with wose and gomme (ooze and gum)."

Partition. The early word for a partition was *parclose* (so beloved of the pre-Raphaelite brotherhood in later times). Our modern word *partition* was coming into use in the early sixteenth century, as we can see from the Windsor Castle A/cs., for in 1533 a payment was made for "a *parclose* flor the Kynges chambre," but in 1534 the paymaster accounts for "making a *partycyon* in the Kynges Closett" (*Hope* I, 251).

Pay. N.E.D. records the verb "pay" in its nautical sense (paying out ropes, etc.) in 1676, but has no record of its being used in building terminology. But the word "pay" derives through French from Latin *pacare*, and in 1352 at Windsor two men were engaged at 5d. a day in "*pacantibus* lathis pro parietibus"—"paying laths for the walls." It would be interesting to know if there is any modern parallel to this usage.

Primer. This is another form of the verb *prime*, not recorded by N.E.D. "Nicholas Lyzard Serjant Painter" was paid at Windsor in 1533 "for painting *prymeringe* stoping gilding and varnishing of a greate Lyon and one Eagle holding up the said vane. first primed with soden oyle 2dly with red lead and oyle sodden together then stoppt with oyles and red lead, then *prymered* twice uppon the sunne and after that wrought 3: tymes in their colours and so gilt with fine gold in oyle and after vernisht" (*Hope* I, 258).

Polrenes. I think it is possible that this word, which I discussed in my last article, may merely be a miswriting for PORLENES=PURLINS. If so, it is the earliest occurrence of the word, as my quotation is 1330-2, and N.E.D.'s first quotation is 1447.

Pugger. N.E.D. gives only a latish record of the verb "pug" in its technical sense, but in the Windsor Castle A/cs we have the surname "Pugger" several times in different spellings: *Punggere* (1297-8), *Puggere* (1310-11), *Poggere* (1311-12). (*Hope* I, 106). The man in question was a carpenter. It is possible that the verb is a debased form of Med. Lat. *punctare*, to point, applied to a special process.

Pulyn=Pulley. N.E.D. has no record of this variant. It occurs 1351-2 (*Hope* I, 170). "Et in ij *pullinis* eneis et ij bolsters eneis emptis pro orlogia ibidem xvs." And in 1354 "j cabula ij *pulyns* de eneo." Brass was much used in making pulleys; e.g., the quotations under COLK supra and DAWKIN in my previous article.

Quarterboards. These are first mentioned 1355-6 (*Hope I*, 177), when "xxix bordis vocatis *quarterbordis* factis de meremio Regis" were bought. There was also a purchase of quarterboards in 1478-9 (*Hope I*, 239), and in 1533 "iiij c of oken *quarterbord* was bought and spent uppon bording of the said gutters on the said leades" (*I*, 264). N.E.D. has no record till 1542, when we learn that they were used for ceilings: "The selyng board shalbe *quartere borde* an inche thyk." According to N.E.D. a "quarter" is a piece of wood 4 inches wide by 2-4 inches thick, used as an upright stud or scantling in partitions and other framing—so quarterboard was probably the board used between these quarters.

Quoin Merchant. A quoin or coin was originally a wedge; then a cornerstone or the key of an arch. In 1344 (*Hope I*, 125) there is an entry "pro iiij c dimid. petris vacatis *Cune Marchaunt* xxxvj. s." This is probably stone-shaped and ready for the market like "Merchant Iron"—e.g., Boace, *Ireland*, 645-52, "They had one tun of good iron such as is called *Merchant's Iron*."

Rengetables. 1367-8 (*Hope I*, 210). "Et pro operatione Dlvij pedum de *Rengetables*."

Willis, *Architectural Nomenclature*, says, "The face of a mediaeval wall is ornamented with horizontal moldings at different levels, which form basements, separate the stories of the building, and crown its upper portions. The general terms for these moldings were *table*, *tablement* or *tabling*; sometimes with the addition of various distinctive epithets." That is to say, a "table" is a string-course. But "table" seems also, to judge by the Windsor Castle quotation above, to have been applied to the separate stones which formed such a course, for "reng" or "range" is simply a synonym for "course." E.g., the "course" in a tournament was called the "range." A payment was made in 1358 for "reparacionem de les hailes, scaffoldes, *rengetes*, listes (barriers)," at Windsor in connection with the keeping of the feast of St. George. (N.E.D., by the way, does not note "list" till 1386 and "range" till 1470.) "Course-courses" is nonsense, but "course-stones" is understandable. Willis's own quotation for "ledgement-table" seems to bear out this usage of the word "table." *Acts of Eton College*, 1441, "416 feet of legement table—clene aparailled (worked) in the form that is called *casse pece*."

Riders. See under FOLDING WINDOWS. I think the quotation should be read, "Ryders as well flore the said wyndowis-off-wayncott"—i.e., wainscot windows, not wainscot riders. A "rider" is another form of "ride," a hinge, though usually the hinge of a door or gate. "Rider" is not noted in this sense by N.E.D. till 1833.

Ringold. A variant of RIGALD (a rail or spar of wood), not noted by N.E.D. 1350 (*Hope I*, 161). "These boards, etc., were bought . . . 100 *ringold*-bolts . . . half a hundred *Ryngoldbord*." (A "bolt" is "wood in special size for cleaving into laths." N.E.D.: not noted till 1688.)

Roughlayer. 1577 (*Hope I*, 274). "Item the Brickleres the *Roughleres* and the Laboures (Labourers') workmanship." Probably the same as "rough mason." Not noted by N.E.D.

Set. Two technical uses of this word are not noted by N.E.D.: (a) in glazing, see under CLORE; (b) in shingling, though setting laths is recorded in 1429 and slates in 1883. In the *Churchwardens' Acts of Strood* (Kent Archaeological Society), 1581-2, a payment was made "to goodmane Betes for *settyng* the syngyles."

Shod Shovels. No record in N.E.D. They are mentioned in 1536-7 (*Hope I*, 264). "vij *shodd scholles* for the

Laborars," in contradistinction to the "bare shoffelles" of 1532-3, "for the playsteres to make mortar with" (*I*, 263).

Solder. 1352-3 (*Hope I*, 164). "In j palet cum j *soldur* emptis pro vitro xijd." Perhaps this is short for "soldering-iron." N.E.D. has no record of "palet" as a glazier's tool before 1588.

Spiking. This is a very common form of (originally) headless nail. There are five varieties recorded: "great," "middle," "second" (perhaps the same as "middle," "double" and "single"). "Middle" spikings are the first to appear; they are mentioned in the *Public Records of Ireland*, 1261, the adjective Latinized into "de mediocri forma." (N.E.D.) Their first occurrence in English is 1350-1 in the Windsor Castle Records (*Hope I*, 133). "Great" spikings are recorded by N.E.D. in 1307; then follow "second" spikings, 1358-9 (*Hope I*, 212; N.E.D., not till 1440). "Double spikings" are recorded in 1408 and "single" in 1586. (N.E.D.) It is not till 1706 that we hear of them with heads, and it would be interesting to know whether the headless variety persists to-day.

Spricket. 1634 in the *Churchwardens' Accounts of Strood*, "Pd more for palles halfe a hundreth and for 14 foott of oken borde and for 4 *sprickets* for the shinglers work." N.E.D. has no record of this word. Perhaps it is the same as SPROCKET, "a triangular piece of timber . . . fastened to the foot of a rafter in order to raise the level of the eaves."

Stone Tiles. Mr. Thomas Falconer, F.R.I.B.A., has sent me the following Cotswold stone tiling terms. The names for the tile courses, starting from the ridge, are as follows:—

Crest; Farewells; Chivellers; Guardians; Short Cocks; Long Cocks; Cuttings; Bachelors; Becks; Wippets; Wivetts or Wibetts; Movedays; Elevens to twenty-threes; Cussomes, the course bedded in the walls at the eaves.

It seems to me that these words fall into five groups, and it is probable that each group originally contained other terms of the same nature, which have since been lost.

(a) GUARDIAN, CHIVELLER, BACHELOR. I think it is possible that the top course of this group had some such name as "crowns" or "kings." (N.E.D. records "crown-tile" in 1842.) Next to the king come his "chevaliers" or "knights," now corrupted into "chivellers." A "bachelor" is a young knight, of lesser rank than a "chevalier." "Guardian" is a synonym of "warden," a knight told off for the special duty of guarding a town. Another possible derivation of "chiveller" is from "chivel," to chip or tear in pieces, hence a "chip" or "fragment." In this case it would belong to group (c). But its association with "guardians" and "bachelors" seems to point the other way.


(b) CREST, COCK. Both these terms were used originally for the top course of tiles or slates. E.g., the *Stone Trade Journal* in 1900 gave a list in which "crests" were omitted and "cocks" occurred at the apex. (Wright's *Dialect Dictionary*.) Cf. "cock-feather," "cock-sheave," and "cock-of-the-walk." But when two sets of terms get amalgamated the "crest" must naturally take precedence of the "cock," which is given second place from the top in Mr. Guy Dawber's *Old Cottages in the Cotswold District*.

(c) CUTTINGS, WIPPETS. These are probably quarry terms referring to the size of the tiles. A "cut" is a definite quantity of yarn or cloth, and the term may well have been applied to other trades. A "whippet" is a small breed of dog, or a slight, frail person.

(d) CUSSOMES, BECKS. Terms referring to the function of the tiles. A list from Whitehaven, Cumberland, quoted in Wright's *Dialect Dictionary*, gives "cussome" as "scursum" or "skussum." Mr. Dawber tells us that

"cussomes" have "a slight tilt downwards, to throw the water off, and project some seven or eight inches." I think the word is a corruption of Mediæval French *coussin*, or *écoussin* (which would account for s-kussum), our "cushion."* Possibly "becks" were originally projecting tiles like "cussomes"; the word would then be a dialect form of "beak," a term often applied to architectural projections; cf. BECKET in my last article. The objection to this is that in three out of four lists "becks" occur in the middle; in the Whitehaven list they are the *smallest* size of slate and are called "lang" (long) "becks."

(e) FAREWELLS, MOVEDAYS. "Movedays" appear as "monedays" in the *Stone Trade Journal* list, but this seems to be an error. Mr. Dawber gives them as third from the top. Perhaps the idea behind both these words is that the tiler—very likely a "journeyman"—has nearly got to the end of his job.

Sturtes. See my previous article. Mr. W. B. Hopkins suggests that as they are used for doors and windows, and "stert" means "tail," they are probably "tailed nails" of this shape , or "crooks," as we call them, on which the door or window is hung. I am inclined to agree with this suggestion. What, then, are the "sturtes" which formed part of the knight's trappings in "Gawaine and the Green Knight"?—"his athel (noble) sturtes, That ever glemered

* "Cushions," because they rest upon a "bed."

and glent al of grene stones." I think Professor Onions is wrong in calling them "studs," and that they are the long ornamented pendants or *tails* of leather attached to the crupper of fourteenth century harness—Viollet-le-Duc shows some with metal ornaments, and doubtless these would be set with jewels in a particularly rich equipment. *I.e.*, it was the "green stones" that caused the "sturtes" or "pendants" to "glimmer and glint," and not, as Professor Onions evidently takes it, that the "sturtes" themselves were made of green stones.

Tabard. 1526 (*Hope I*, 252). "Leyeng tabardes for your chappell roff and takyng down the olde lede." 1533. The "tabard off the lantorne off the Kynges closet by his chappell" was repaired by the plumber. 1534-5. The bricklayers were "howing (hewing) of crestes in the walles over the leades of the Kynges warddrobbe Redy for the plommers to put in the *taberdes* over the gutters there." N.E.D. has no record of this word, and does not mention "leads" till 1578. A "tabard" was the familiar apron-like dress of a herald, and hence was applied to what are now called "aprons"—a word which probably superseded it when the herald's tabard was no longer a familiar sight.

Tar. "Tar" as a noun appears in the language very early, but the first record of the verb "to tar" is in 1395-6, when persons were employed about the "teryng" of the Black Tower at Windsor. (*Hope I*, 226). N.E.D. has no record till 1473.

THE PRESERVATION OF RURAL ENGLAND.

The *Times* made the preservation of rural England the subject of a leading article in their issue of 10 December, basing their remarks on the circular to local authorities sent out by the Ministry of Health on 29 November, a copy of which was published in our last number (p. 125). The *Times* article is printed below:—

It was no secret that the Society for the Preservation of Rural England and the Royal Institute of British Architects were working out a scheme whereby advice on the maintenance and improvement of rural amenities could be given free to any owner of property or local authority who cared to ask for it. In this journal on Saturday there was an account of a circular which has been sent by the Ministry of Health to all local authorities in England and Wales. Circulars are a means of influence much favoured by the Minister of Health, and, seeing how delicate is much of the ground upon which he has to walk, and how good many of the circulars are, he is doubtless wise to trust to his circulars rather than to the more drastic methods which, at question time in the House of Commons, he is sometimes urged to adopt. There is an admirable Act of Parliament called the Housing (Rural Workers) Act, 1926, under which local authorities may (or must, if the Minister of Health requires it) submit to him schemes for reconstructing and improving existing agricultural cottages, and advance money for the work. Under that Act more is being accomplished than is generally realised. But since old cottages (at Bibury and elsewhere) may have their peculiar beauty or their value of association, their reconstruction is clearly a matter in which the Society for the Preservation of Rural England is concerned. The Society, therefore, and the Royal Institute of British Architects between them have brought

forward their scheme for advisory panels, to be put at the service of any owner of cottages or any local authority who wants to help to lighten the housing difficulty but is afraid of destroying old beauty in the process. And the Ministry of Health brings the proposal before the notice of the local authorities in a circular which also serves the good purpose of giving another little fillip to the Housing (Rural Workers) Act.

The circular does not stop at that. It suggests the consultation of such an advisory panel in town-planning schemes; it shows that good work may be cheaper than bad; and it rather shyly brings forward the notion of more or less standardised types of new cottage, suitable for different districts—a notion which is sure to appeal to most country builders, who really have no ideas of their own and will be more than ready to do what they are assured is the latest thing. Before this, the Society had already issued pamphlets on repairs to cottages under the Act; and it evidently sees the urgent need for some sort of good counsel and guidance just beyond the border where town-planning stops. There is no doubting that the rural amenities would be in a desperate plight without the Society and the equal vigilance and activity of the Royal Institute of British Architects. But it is also clear at a glance that these cautious steps towards the protection of old beauty and the right development of new amenity will seem to some a very small advance and to others no advance at all. Some letters published in this journal last month showed that certain people well qualified to judge are ready to despair of rural England unless the law is put in motion and persons and public bodies are forced to do that which at present they are only urged or advised to do. The idea is tempting. Education, stimulation by circular,

free advisory panels—all seems so admirable, but so slow, when rural England is being devastated under our eyes. More and more does mere human impatience feel inclined to clamour for plenary powers in the hands of one man—Mr. Guy Dawber, perhaps, or Professor Patrick Abercrombie—with Mr. Chamberlain's inspired caution to back him. Such feelings might usefully be sublimated into the writing of a cheque for a large amount to the Society for the Preservation of Rural England; because on the whole, the work is more likely to get done in the traditional English way than by drastic and dictatorial methods. Exasperatingly slow though the movement is, it has unmistakably begun; and it cannot fail (as Mr. Chamberlain has realised about the use of the Housing Act) to gather momentum. On the other hand, it must never be forgotten that the fundamental question is beauty; and anyone who tries to bully an English council or an English man about beauty had better try to push St. Paul's Cathedral down Ludgate Hill.

DUNSTER YARN MARKET.*

For some time past the ancient Yarn Market at Dunster, West Somerset, has been in an extremely dilapidated and decayed condition. Damage which it suffered in the recent gales has caused some fears for the safety of the structure, and has emphasized the necessity of steps being taken to secure its preservation. It has now been decided to renovate the building, and the work is to be undertaken by the Dunster Castle estate. Everything possible will be done to preserve the original features of the structure. An expert has already examined the building, and materials in keeping with the period will be used in the renovation.

Standing in the middle of Dunster's historic main street, and facing the castle, the home of the Luttrell family, the Yarn Market dates from the sixteenth century, and is now the sole remaining relic of the days when the village was famous as the mart for the noted Dunster homespun and broadcloths. Here the West Somerset weavers once flocked to offer their wares to cloth merchants who came from all parts of Europe to purchase the finely woven cloths for which the district was famed.

PRESIDENT OF THE ROYAL ACADEMY.

At a General Assembly of Academicians held on Monday, 10 December, 1928, Sir William Llewellyn, K.C.V.O., R.A., was elected President of the Royal Academy, in succession to the late Sir Frank Dicksee.

Sir William Llewellyn is known almost exclusively as a portrait painter, his most successful work being the State Portrait of Queen Mary, painted in 1910 and now at Windsor. He also painted the portrait of the Queen for the United Services Club, and among his other portraits are those of Field-Marshal Sir George White, Sir Francis Hopwood and Lord Colville of Culross.

* This is the building referred to by the President in his Inaugural Address (see JOURNAL of 10 November, p. 5).

MR. E. H. NEW'S LATEST PRINT:

NEW COLLEGE, OXFORD, FROM THE SOUTH.

All architects will be glad to hear that Mr. New has just completed a new example of his serene and delightful art. In this print, which is a continuation of what he appropriately calls the New Loggan Series, a bird's eye point of view is chosen so that the whole group of buildings of New College may be included in one picture. The plan is thrown into perspective and the elevations facing the spectator are given their true proportions. This plate supplements the first of the Series, which showed the College from the west.

Mr. New's careful draughtsmanship is indicated in this as, indeed, in all his drawings, and is as decorative. The prints will always be valuable as topographical and architectural records of the subjects which he chooses to depict, and will also certainly increase in commercial value. Mr. New's work indicates infinite patience and infinite love for his art, quite irrespective of any popular appeal, and we hope that his reward may be proportionate to his labour, in an age when the qualities which he exercises are too rarely appreciated. Mr. Emery Walker is responsible for the reproduction as a photo-etching of the drawing in question, which can be seen in the R.I.B.A. Library. R. D.

EARLY USE OF CONCRETE.

Two interesting letters from Sir C. W. Pasley to Sir Robert Smirke have been presented to the Institute by Messrs. Charles and Frank Woodward [A.A.]. Pasley, whose book, *Observations on limes, calcareous cements, mortars, stuccos and concrete* (1838) is in the Library, was engaged on this work when he wrote the earlier letter (12 January, 1838), asking for particulars of the Custom House and its foundations, and of certain methods of concrete building advocated by a Mr. George Sempie, whose work (*Treatise on building in water* . . . , 1776, 2nd ed. 1780) is also in the Library. Pasley refers to Smirke as "the first person who used concrete usefully externally and successfully." Sir Robert Smirke has added manuscript notes in the margin.

The later letter (19 December, 1838) asks about the foundations of the Penitentiary (since destroyed) at Millbank, and refers to Sir John Rennie's claim for his father as having been the first user of concrete. There is a postscript praising a new cement produced by Greenwood. These references to early uses of modern concrete compare with interest with the introduction of cement and stucco half a century before as summarised (*inter alia*) by Mr. Maurice B. Adams in *Architects from George IV to George V* (JOURNAL, 1912, pp. 602, 646).

H. V. M. R.

PUBLICATIONS RECEIVED.

- THE A.B.C. OF PLASTERING. By A. H. Telling. 120. Oxford and Lond. 1927. [Oxford University Press.] 8s. 6d.
PLASTERING PLAIN AND DECORATIVE. By W. Millar. 4th ed. By G. P. Bankart. Sm. 40. Lond. 1927. [Batsford.] £1 10s.
SPECIFICATIONS AND SPECIFICATION WRITING. By R. W. J. Davis. (D.U. Technical Series.) 80. Lond. 1927. [Chapman and Hall.] 6s.

Schools of Architecture

THIRD SERIES

III.—The School of Architecture, Leeds College of Art

BY JOSEPH ADDISON [A.].



LEEDS SCHOOL OF ARCHITECTURE: THIRD YEAR
Study in Classic Composition

The Leeds School of Architecture, founded in 1904, and "recognised" by the Royal Institute of British Architects in 1915, was entirely reorganised in 1921 and a five years' full-time day course established.

The School is situated in the centre of an important industrial area, the volume and variety of its manufactures making it possible for a large number of professional architects to be employed. This area will absorb the qualified men from the School for many years, and in a great measure this factor has governed our educational policy.

In its aims and ideals the School is essentially professional, every student being trained with a view to his filling a post, at first as an assistant and later as a practitioner, most probably in Yorkshire. At the same time, the cultural aspect of architectural study is not overlooked, and a broad and comprehensive curriculum is provided, which every Diploma student is expected to amplify by a period of travel and study abroad. In addition, a number of Diploma students take their period of office training during the fourth and fifth years of the course in London and New York.

The School works in close association with the West Yorkshire Society of Architects, which has organised a Students' Section; and the Council of that body award annually several valuable travelling scholarships, act on the School juries and Committees and assist in finding posts for students leaving the School.

In this article it is only possible to give a brief outline of the educational policy followed in the School. In general the curriculum is similar to that applying in other schools, any variations which may exist being dictated by local needs and conditions. In carrying out the curriculum in practice, however, considerable changes on the old academic method of teaching have been made. The academic method, based almost entirely on theory, with hypothetical programme requirements and site conditions, was found to lack realism and cramped the natural development of the student's imagination. Only a small proportion of students were found to respond, and these within very narrow limits.

AN ILLUSION OF REALITY.

To enable the student to form a sympathetic understanding of the purpose of architecture and architects from the commencement of his school career, an endeavour has been made to frame his studies so that he feels he is engaged upon the actual problems which the architect is daily called upon to solve. By every student and master strenuously endeavouring to apply this principle to the work of the School, a strong and vital enthusiasm is generated, and all types of intellect stand to benefit in the process.

The principle applied by the late F. W. Sanderson at Oundle has been a source of inspiration in the formation of the scheme, the students working as a community of architects, each performing duties proportionate to his

position in the School course, and every problem tackled corresponding with actual projects within the City of Leeds. The selection of the programme and the site or sites is of paramount importance, for they must contain elements which are not only readily appreciated by the student but sufficiently vital to stimulate his imagination. The idea of a comprehensive building programme within the city, where the diversity of the subjects will



LEEDS SCHOOL OF ARCHITECTURE: FIRST YEAR
Study in the technique of draughtsmanship

embrace all years of the course, and yet allow of being considered under one policy of reconstruction, offers concerted action on the part of the students and helps them to appreciate the practice of architecture from a wider standpoint.

A SENSE OF VALUES.

Only by considerable experience in the solution of practical problems can the student develop that all-round ability and confidence, so necessary in practice.

By carefully graded exercises into which are brought the fulfilling of clients' needs, the vagaries of the building industry, the potentiality of sites, the limitations of by-

laws and cost, and, what is still more important, the thoughts and feelings of the educated public on architectural questions, it is hoped the student will obtain a sound preparation for his ultimate duties as a public servant and guardian of a noble art.

At no stage is the student too young or inexperienced to deal in some measure with these problems, but whereas in the past the student only faced them collectively after he had left school and was engaged on his first few commissions, he now has an opportunity to become acquainted with them, and experiment with them in the School.

For the successful accomplishment of good architecture the architect must have a highly organised mind, capable of resolving many apparently conflicting factors, and bringing them into harmony with the fundamental idea which is the basis of his design. Consequently he is trained to approach his problems from many angles and resolve his deductions into a design at once practical, economic, and artistic. He readily perceives that these three qualities must exist together in every successful work of architecture.

Thorough analysis and synthesis are of vital importance in the problems of the present day, when planning and structure are of premier importance. The student must be trained to realise that a modern building is a highly complex organisation including, apart from its structure, the skill and products of at least a dozen specialised forms of engineering. Of these the student must have a knowledge at least sufficient to enable him to visualise the buildings he designs, "under working conditions" or "under test," and it is desirable that his mind should travel forward if possible to the stage of anticipating developments in these subservient branches of building science. Such flights of fancy will do no harm, and should at least make for nimbleness of mind and stimulate him to new ideas.

A SPHERE OF USEFULNESS.

Familiar with the work of the architect, conversant with the factors which go to make good architecture, and trained in the process by which sound analysis and synthesis are made, the student is in a position to complete the last stage of the course, which is devoted to the application of these, to problems which are still more closely related to actuality.

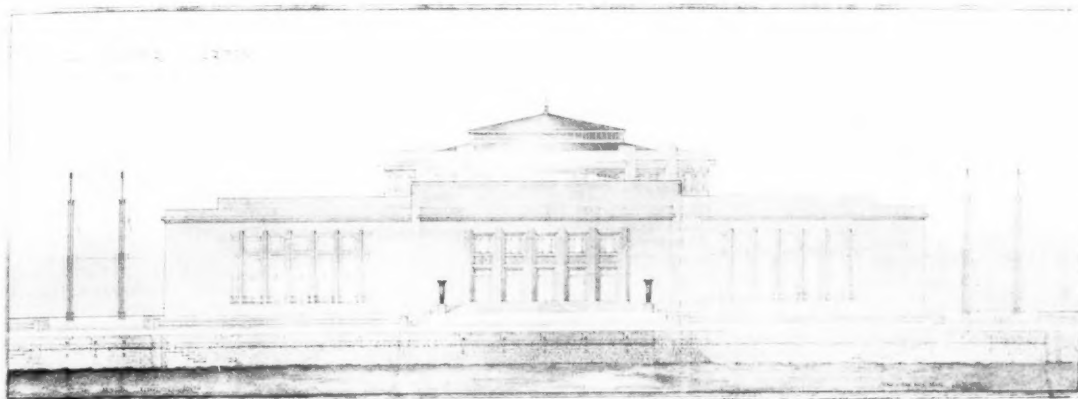
At this stage the intricacies of land purchase, contract agreements, finance in relation to building operations, town planning development, professional etiquette, and the general responsibilities of the practising architect are studied in direct relation to some "problem" likely to be carried out in the City of Leeds in the near future.

It is most desirable that the general principles of law and finance and etiquette in relation to building works be taught, and that the students are made aware of the many pitfalls which await the young architect in practice such as the purchase of his freedom and authority by illicit commissions.

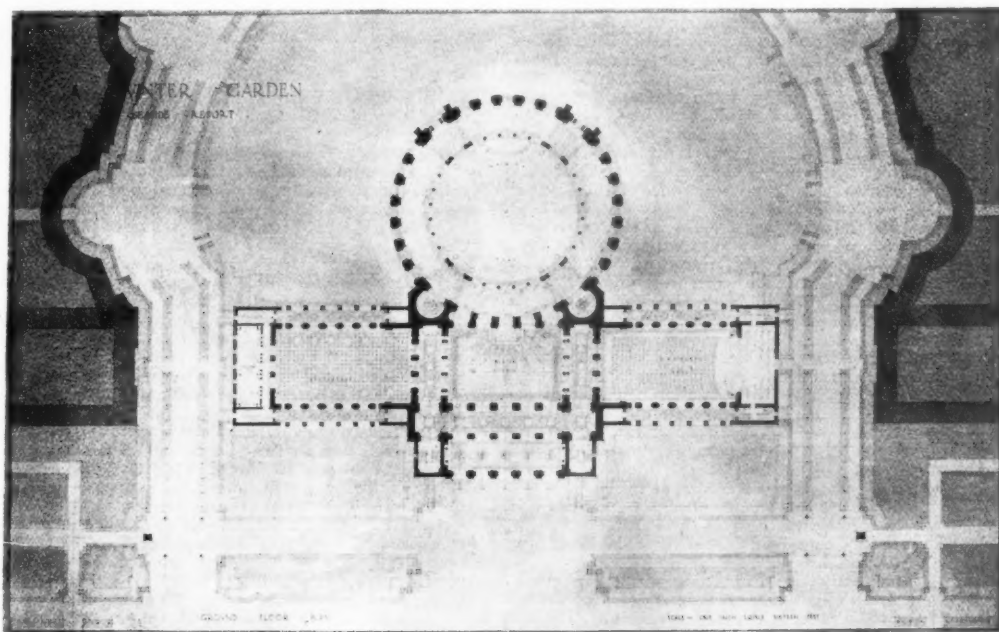
While it must be admitted that all these factors can only be tentatively studied, an introduction to them is necessary, and if he is given the basic principles and an outline of their application in practice, the student should be on much surer ground than if he were left to discover

these in piecemeal fashion later. It also helps to enable him to maintain a sense of values, which he might other-

few commissions. He must be trained to appreciate that his real function either as an assistant or practitioner



LEEDS SCHOOL OF ARCHITECTURE: THIRD YEAR
Study in Planning Composition



LEEDS SCHOOL OF ARCHITECTURE: THIRD YEAR
Study in Planning Composition

wise find difficulty in doing without training, when submerged in a welter of practical difficulties with his first

is the design of buildings, and that no one *should* be more fitted than he to do that work.

Allied Societies

(The attention of Members of the Allied Societies is specially called to this page)

SHEFFIELD, SOUTH YORKSHIRE AND DISTRICT SOCIETY OF ARCHITECTS AND SURVEYORS.

A meeting of the Sheffield, South Yorkshire and District Society of Architects and Surveyors was held at the University, Sheffield, on 13 December 1928, when a Paper was read by Mr. Howard Robertson, F.R.I.B.A., S.A.D.G. The President, Mr. C. M. Hadfield, F.R.I.B.A., was in the chair. We print below a résumé of Mr. Howard Robertson's paper.

Every great epoch in history has had its reflection in its architecture. In the age of Pericles we find buildings of simple plan and construction, worked out in something approaching perfection of architectural form. The Roman period was one of great organisation, huge undertakings, something akin to mass production. Bold, fearless, with grandiose ideas, Roman designers were engineer-architects of vision. Occasional coarseness marked their buildings, the conception of which was nearly always splendid. In the hey-day of the Byzantine, we find beauty of form allied to an almost unparalleled talent for decoration. And then we come to the middle ages, a period of great structural daring, of freedom and individuality, of a spirit combined of mysticism and energy translated into the soaring naves of the great cathedrals.

With the Renaissance comes the sway of intellectualism, eclecticism, scholarship, softening at its close into the romantic and luxuriant Baroque. And then following upon the elegance and refinement of the eighteenth century is a long barren stretch of architectural inertia, marked more or less by futile revivals of Classic and Gothic, culminating in a parvenu period which reflected the material prosperity of the nineteenth century. Out of this century came, however, the promise of a renewed architectural vitality, largely brought about by the influence of the engineer. The Crystal Palace, the great machinery halls of Paris, the steel library of Sainte Genéviève, were structures in which the art of the architect and the science of the engineer were combined. Construction, fitness for purpose, began to take precedence over the purely academic ideals in architecture. The resulting buildings were not always beautiful; but they were often vital. The fetters of the academic standard in design were already loosened; it began to be dimly realised that style comes with well-building, is inherent in its structure and the expression of purpose, and is not grafted on as a veneer.

To-day, our epoch has its character. It is the age of invention, the age of the active brain. Our problems are vast, there is a growing demand for their solution; and, in architecture, the demand creates the supply. We live in a competitive age. We have to bestir ourselves. The architect who is asleep will soon perish. There is no time to-day for half measures in design. There can be no interference with function through preconceived notions of style. The job of the architect is to serve client and community, and if there is no ready-made garment in the wardrobe of style, the architect must create one. And that is happening to-day.

The result, temporarily, is an upsetting of fixed standards. For completely new designs there is a dearth of precedent, a lack of basis on which to form a critical judgment. There is also involved much tentative experiment, bringing in its train failures as well as successes. The main business of the architect is embraced in the word "organisation." Design is well-ordered arrangement. If touched with some fine human quality it becomes good and beautiful design. But primarily it is order and harmony. The architectural failures of the

last hundred years are largely due to lack of order; to lack of grasp of the problem, lack of sequence in ideas for its solution, lack of imagination, all resulting in an architectural untidiness. Untidiness rules everywhere, in our town-planning, the development of our suburbs and arterial roads, the grouping of individual houses, the planning of petrol stations, public conveniences, the placing of advertisements and signs. There is, in fact, practically nothing in our towns, in any way connected with architecture, which does not suffer from the plague of untidiness and disorder. We have only to look at our London thoroughfares, their ill-composed street frontages, plastered with great signs and advertisements, to realise that each is branded with disorder. The effort of the modern architect is primarily directed towards a process of "cleaning up." He longs to compose, to bring order out of chaos, to arrange logically, to plan simply and elegantly. On the aesthetic side, he is increasingly interested in expressive design, in extracting the maximum inspiration from the problem at hand.

The growing influence of women in every-day affairs is having its effect in architectural design. Women are good critics, they have a natural instinct for decoration, they demand improved surroundings; the conveniences of life, shops, hotels, apartment houses, depend to a large extent on the favour of the womenfolk. As a consequence, they are doing their best to bring themselves up-to-date in order to cater to the woman client. An asset to the improvement of architectural standards is the interest of the press. Architecture of to-day has a first rate press; it is becoming of value as news, and this is due to the fact that modern buildings are revealing character and attracting attention by the evidence of original thought which enters into their design.

An outlook which is commercial in its worst sense still characterises much of the vast amount of new building which is going up in England, apart from domestic work. There have been, for example, several enormous cinemas erected in London, some of them on very important sites. Internally they are fair examples of "movie period" architecture, but externally they are atrocious examples of poor and pretentious design. There are plenty of business premises which are no better, with their elevations which are tasteless and vulgar, covered with signs which are obviously after-thoughts. To the English mind, untidiness is too often labelled picturesqueness. Whitehall, Regent Street, Bond Street, Kingsway, are streets with character, and they have a varying degree of orderliness; of most of the best London residential districts we can say the same; but Oxford Street, Tottenham Court Road, the Strand, have no architectural character; we are content with them merely because their slovenliness is familiar.

Simplicity is the first effort in the direction of order. Hence modern buildings are restrained, sometimes even bare. But it is generally found that in good modern work there is always some interest in the ground storey, where the passer-by can appreciate it. And modern shop fronts are particularly good examples of this very logical treatment. Paris excels in this respect. New materials and new ideas reflect the fashions of to-day, and that is perfectly normal and justifiable. There is, for instance, a very original shop front in Paris, the façade of which is entirely composed of metal plates. It suggests the age of mechanism and science, but does it with extreme elegance. Design based on function is becoming a matter of course. A striking example of this is the new Salle Pleyel in Paris, a gigantic concert hall shaped like a shell, the whole form being based on the results of an acoustic diagram. Artis-

tically, it is extremely impressive, acoustically it is practically perfect.

Modern construction methods also influence design. For instance, reinforced concrete. At Bâle, in Switzerland, is a remarkable new church, the walls of which are screens of concrete tracery, while its tower is of a slender elegance which could never be realised in stone or brick. We can see, also at Bâle, an experiment which does little justice to concrete, the headquarters of the Anthroposophical Society. It was designed by Rudolf Steiner, a great thinker and even a great artist, but a failure as an architect. This building is conceived in plastic shapes, and crouches on a mountain-side like some great toad. In Germany there is some excellent and sober work, as in the charming group of the Permanent Exhibition Buildings at Düsseldorf. Hard-by, at Cologne, the Pressa Exhibition has just closed its doors. Here was some interesting work, including a Soviet pavilion devoted to propaganda; but the most exciting exhibit was an all-steel and copper church, made in sections at the approach to which stood a magnificent statue of Martin Luther, made entirely of copper plates. Sweden is still among the leaders in modern architecture. In Stockholm is a fine new library, designed with great severity of form, but with beautiful detail recalling the work of Sir John Soane at the Bank of England. In this building is a children's room, designed with a semi-circular end on which is painted an allegory called "the Umbrella of Dreams." In front of this is a single desk; and here, every afternoon, a reader from the library entertains the Stockholm children with legend and fairy story.

In France, the modern movement carries all before it, and domestic architecture is breaking away completely from tradition. Houses of cubist form, with flat roofs laid out as gardens, terraces in the upper floors, and very wide metal windows are becoming increasingly popular. One of the most interesting is a new house by Le Corbusier, the author of that remarkable book *Towards a New Architecture*. In this house all the points of support are within the walls, which are merely a light screen of concrete and glass. The interior is extremely spacious, the living section consisting of one large area opening on to terraces, and beautifully lit with windows from floor to ceiling. The sleeping accommodation, the dining room and its services, the garage and heating plant, are all treated as self-contained units, and very practically arranged. Externally this house looks a little like some great ship-like machine; but internally it is very delightful. And though extremely modern, it is furnished with antiques; a successful experiment in blending the ancient and the modern. Housing is receiving increased attention, and also city planning. There is a proposal in Paris for placing vehicular traffic underground, with pedestrians only on the main street level. And there is a scheme for huge blocks of flats stepped back in terraces, the interior of which will be devoted to gigantic garages. It is an attempt to solve, in one building, the problems of congestion, human and mechanical.

NORTH WALES ARCHITECTURAL SOCIETY.

At the General Annual Meeting of the North Wales Architectural Society, held on Saturday, 8 December, at Colwyn Bay, the Special Committee appointed to re-draft the constitution presented their report, which was adopted.

The election of officers for the year resulted in the appointment of Mr. G. A. Humphreys, of Llandudno, President, Mr. H. Harold Hughes, Bangor, Vice-President, and Mr. Richard Hall, of Bangor, Honorary Secretary and Treasurer.

The Council is composed of the above-named officers with Mr. E. W. Burnett, Colwyn; Mr. S. Colwyn Foulkes, Colwyn; Mr. E. Roughley, Prestatyn; Mr. W. B. Edwards, Flint and Mr. R. D. Jones, of Pwllheli, all full members, with two Associate members and one student.

THE WESSEX SOCIETY OF ARCHITECTS.

The Wessex Society of Architects held its annual dinner on Tuesday, 11 December, at the Royal West of England Academy, Queen's Road.

Following the loyal toast, the Bishop of Bristol, proposing "The Royal Institute of British Architects," said that nowadays one heard a great deal about self-expression, but he regretted much of what passed for self-expression in architecture. What a tragedy Park Lane was to-day, and what were called "bungaloid" growths on the countryside! How was it, he asked, that they did not always get from architects something of what they felt when they entered an old-world village. If he had to train architects, he would get them to read the histories of the localities in which they worked, and understand something of the imagination of the past, make them value the poetry and get something of the natural feeling of places so that they would not plant anything down that was totally incongruous. The worst tragedy of all, however, was the abominations found outside garages on the country roads. Surely, something could be done to eliminate these. The public looked to architects to prevent the spoliation of the beauty of England which they so greatly valued.

Mr. Walter Tapper (President, R.I.B.A.), responding, said the Council of the R.I.B.A. were greatly indebted to the men of the west who rendered such valuable service, especially Mr. G. G. Lawrence, who had been elected to the vice-presidency, and Mr. Overbury, the president. He took the opportunity of thanking all those who helped in any way to make the recent conference at Bath a success. The Royal Institute, during the past year, had added to its strength by the formation of a Wilts and Dorset branch under the presidency of Mr. Harold Brakspear, and he was quite sure that even in these materialistic days it had a future of real usefulness before it. Also, during the past year, there had been a wave of enthusiasm for the preservation of the Wessex countryside. There was no region in England that was more in need of such a campaign, or more in need of defence from attack. It was not only the beauty of the scenery that was concerned, but the charm of so many of the Wessex towns and villages which was equally worthy of preserving. Clearly, architects ought to take the lead in such a campaign, and the Council for the Preservation of Rural England could go forward assured of the real and untiring efforts of every member of their Society. Bristol was a fine city, but who could say that it would not be finer if every available opportunity was taken to improve its civic architecture, to develop its suburbs, and clear its congested areas in a great scheme of re-planning to meet the demands of modern traffic. It was the primary duty of architects to endeavour to make the civil authorities aware of the need.

Mr. Percy Thomas (Chairman, Allied Societies), responding, said, in the matter of registration, they all looked forward to a Bill which would give them the principle of registration with the Royal Institute as the governing body. If that was achieved, it would be a great step forward. They would have brought to their notice shortly, a scheme of re-organisation which would make for the betterment of the Royal Institute itself, and would be of great value to the Allied Societies. He hoped the scheme would have their support.

Mr. J. E. Barton gave "The Visitors," and said the profession of architecture was above all things alive, largely from the fact that they were living in an age of constructional necessity.

Mr. C. R. Setter (President, South Western Federation of Building Trades Employers) replied.

Mr. S. Kitson gave "The Wessex Society of Architects," and said the first honorary fellow of the Society was Thomas Hardy, a name that for all time would be associated with Wessex.

Sale of 28 Bedford Square

REPORT OF SPECIAL GENERAL MEETING, 3 DECEMBER 1928

A Special General Meeting of the Royal Institute of British Architects was held on Monday, 3 December 1928, Mr. H. V. Lanchester, Vice-President, in the Chair.

The minutes of the Special General Meeting held on Monday, 19 March, having been published, were taken as read and approved.

The CHAIRMAN: This is a Special General Meeting, called for the purpose of considering and, if thought fit, passing, the following resolution:

"That this meeting hereby approves, ratifies and confirms the Provisional Agreement for the sale of No. 28 Bedford Square, made between the Royal Institute of British Architects and the Architectural Association, produced to the meeting and for the purposes of identification initialled by the President and directs the Council of the Institute to carry the said Agreement into effect."

Are there any questions upon that? Colonel Hopkins will move the resolution.

Lieut.-Col. P. A. HOPKINS [L.]: As Chairman of the Finance Committee, I have to move that resolution. By way of explanation, I might remind members that on the amalgamation of the Society with the Institute, the assets of the old Society became the property of the Royal Institute of British Architects. The premises, at that time, were put down as of the value of £3,400 odd. That was three years ago. Since the Royal Institute has had possession of those premises they have involved an outlay of between £200 and £300 a year over and above the income. Since it has been decided that the Royal Institute is to have new premises, it means finding a site and entering upon building, and so we have to realise all our assets. No. 9 Conduit Street will be sold, I think, and in that case we want to make as much as we can of the Bedford Square premises. We are in the happy position that instead of spending £200 to £300 a year on the premises in Bedford Square we shall be able to realise a cash amount of £5,000. That, I think, is a matter for congratulation to the members of the old Society. Therefore should any member here wish to ask any questions as to the details, I shall be happy to answer them. But to make the matter short I propose that resolution, and I hope I shall find a seconder for it.

Mr. E. C. P. MONSON [F.]: I shall be pleased to second it. This is an excellent solution of the difficulty. We have been spending £250 a year, and now we shall be receiving £250 a year as interest on our money, so by this transaction we shall be £500 in pocket.

Mr. W. GILLBEE SCOTT [F.]: Before you put it, I should like to draw the attention of the meeting to the question of the new premises. I think I am in order in that, because I presume that this matter undoubtedly is the effect of the question of new premises for the Institute, and I ask whether we may have the opportunity of speaking on the new premises question later.

The CHAIRMAN: Yes, you will have that opportunity, because after the formal business members will be invited to discuss any subject, and it will arise under that invitation.

Major H. C. CORLETTE [F.]: May I rise to support the resolution.

Mr. W. H. ANSELL [F.]: As President of the Architectural Association, I have horrid doubts in my mind as to the wisdom of the A.A. in making this generous offer to the Institute! But, under all the circumstances, I do not wish to press those doubts, and I rise to support the resolution of Colonel Hopkins.

Mr. S. D. KITSON [F.]: Had these premises been placed in the open market it is possible—though doubtful—that we should have obtained a better price than we have got from the Architectural Association, but we felt, as she is our daughter institution, that we had a certain parental duty towards the Architectural Association, and we wish them well in the very good bargain which they are getting.

The CHAIRMAN: You have now heard both sides. If there are no further remarks, I will immediately put this resolution.

Mr. DIGBY L. SOLOMON [F.]: In order to fortify the Institute in what they have done, I would like to ask whether they have taken the opinion of outside gentlemen to confirm the figures?

The CHAIRMAN: Yes.

The CHAIRMAN: I will now put it.

The resolution was carried unanimously.

Architectural Competitions

REPORT OF GENERAL MEETING (BUSINESS) 3 DECEMBER 1928

The Third General (Business) Meeting of the Session was held on Monday, 3 December 1928, at the conclusion of the Special General Meeting, Mr. H. V. Lanchester, Vice-President was in the Chair.

The minutes of the Ordinary Meeting, held on November 19, having already been published, were taken as read, and approved.

The following gentlemen, attending for the first time since their election, were formally admitted by the Chairman:

Mr. F. C. Mears (Edinburgh), Fellow.

Mr. G. H. Wenyon, Fellow.

Mr. Raymond McGrath, Associate.

The CHAIRMAN: We now proceed to the election of candidates for membership, and I will call upon the Secretary to read the names of one candidate for Honorary Fellowship, and 27 candidates for the Fellowship, and if it is the pleasure of the meeting, I will put them *en bloc*.

The SECRETARY (Mr. MacAlister): The candidate for the Honorary Fellowship is H.R.H. the Duke of York.

The CHAIRMAN: I will put that name separately.

Carried by acclamation.

The SECRETARY read the names of the 27 candidates for the Fellowship, and they were unanimously approved.

There are 74 candidates for Associateship, 6 candidates for Hon. Associateship and 3 candidates for Hon. Corresponding Membership and I will ask the Secretary to read their names. If it is the pleasure of the meeting I will put them for election *en bloc*.

The SECRETARY read the names, and they were unanimously approved.

The CHAIRMAN: The next business is to consider and, if thought fit, to approve the Council's proposals for the amendment of the Regulations governing the Promotion and Conduct of Architectural Competitions. I will call upon Sir Brumwell Thomas to move the amendments.

Sir A. BRUMWELL THOMAS [F.]: I beg to move that on page 1, after paragraph (c), the following words be inserted:

"This regulation shall also preclude the regular staff and

present students of a School of Architecture from taking part in a competition in which a member of the regular teaching staff is acting as sole assessor, but not in cases where a jury of three or more assessors is concerned of whom only one is a member of the regular teaching staff."

Mr. W. GILLBEE SCOTT [F.]: I will second that.

Mr. HERBERT A. WELCH [F.]: I take it that the clause reads that it embodies all the schools of architecture at the present moment?

The CHAIRMAN: It would cover everything.

Mr. F. R. JELLEY [A.]: To strengthen the matter I would like to move an amendment, namely, to omit the word "sole," and cut out all after and including the word "but" to the end of the sentence. If you have an assessor, it does not matter whether he is one-third assessor or one-twenty-fifth, he is still an assessor, and if you include this piece at the end of the sentence, whereby a man is not prohibited from acting as assessor if he is one of a jury of three, that is wrong in relation to what you lay down in the first part of your resolution.

Mr. W. J. H. LEVERTON [F.]: I second that.

Mr. JELLEY: It is my point that if an assessor has been appointed in one circumstance as sole assessor, and that is considered wrong, under the terms of this resolution, it is equally wrong, if he is appointed as one on a jury of assessors.

The CHAIRMAN: The framers of this considered that might be too onerous, and if it were one of three, it was not unduly weighting the balance in favour of his own students. You do not agree with that?

Mr. JELLEY: My point is, that if it is wrong in one case, it is equally wrong in the other case. If it is assumed he is or might be biased in one case, it must be assumed he might be biased in the other case, even though he may be only one-twentieth or one-fiftieth of the body concerned.

Mr. LEVERTON: Out of three assessors he might have a stronger personality than the other two, and might carry all before him.

Mr. W. H. ANSELL [F.]: I oppose this amendment, as I consider it is unnecessary. We do not want unnecessarily to add to the number of rules and regulations, and I think the resolution as it stands is protective enough. The regular teaching staff of some of our architectural schools now numbers men who take very little part in the teaching, but are still regular. They may give only one lecture a year, but they are still part of the regular staff, and they come under this resolution. And to bar them from taking part in a competition because the head of the school or one of the staff may be one of a jury, is unnecessary and rather futile. It is handicapping the men, and I do not think it is for the good of competitions or for the good of promoters. You are barring good men for the sake of a quibble, and I oppose this amendment.

Major H. C. CORLETTE [F.]: I oppose the view of the last speaker, and I support the amendment, because if it is wrong in one case it is also wrong in the other. The only course to pursue is to be very careful about whom you nominate as assessor so as to avoid difficulty.

Sir BRUMWELL THOMAS: The general feeling of the Committee was first of all in favour of a regulation such as is now being proposed, but we circularised the heads of schools, and the general feeling we came to was that it would be unfair to a large number of members of the profession, in case of an important competition, and one of two things would have to happen. The professors of the schools said: "We must either stand aside and not take an assessorship, or you must allow it to be varied in the case of juries." The matter was very seriously debated, and, in the end, we concluded that this was the fairest way of meeting the difficulty. The professors of the schools were very disposed to adopt this proposal, because it placed them in the position of sole assessor in the event of selecting one of their own school. And they rather welcomed it. This wording is the outcome of a consideration

of all sides, and we thought it was the fairest condition which could be imposed.

The CHAIRMAN: If you were to bar all teachers from an assessor's position it might have that effect; that a man who felt himself to be good at assessing might refuse a teaching position. You rather limit the area from which you can select good teachers. But if you bar all teachers from taking part in assessing competitions, you limit the area from which you can select assessors. But I do not wish to influence the meeting; I would rather discussion should go on openly and that you arrive at your own conclusions.

Mr. DIGBY L. SOLOMON [F.]: We must ignore the question of students. I think that what Major Corlette said is right; if it is correct in the first instance it must be so in the second. The question of exclusion cannot be a large one if only one school is excluded in one competition.

Mr. ANSELL: It is not only students, but teaching staffs. We do not encourage students to go in for competitions, but teaching staffs come under a distinctly different category.

Mr. J. E. FRANCK [F.]: I think it is not so much a question of principle as one of expediency, and I think that what Mr. Ansell said is true; it affects many men who simply do a portion of the teaching, and it handicaps them severely. And that means a large body of men.

Major CORLETTE: I think if we are to discuss a matter of this importance we should discuss it from the point of view of principle, not from that of expediency.

The CHAIRMAN: I suppose both sides will claim it as a question of principle. It may be said that where a man is only a minority, he has not so much power as when he is sole assessor.

Major CORLETTE: I respect the view of those who think well of expediency, but where principle is concerned we should not compromise.

Mr. S. D. KITSON [F.]: There is something which is above principle, and that is fairness. This matter has been very carefully thought out, and it seems to me to be an extraordinarily fair compromise. We as a nation have become great because we have compromised, because we have had the courage to compromise. I think this is a very fair compromise, and I hope the meeting will vote in favour of it.

Mr. ALAN E. MUNBY [F.]: If we have a Committee who take the trouble to thrash this out, I think we ought to accept their decision. I do not think we, in a meeting like this, are in nearly such a good position to judge the merits of the case all round as they are.

Major CORLETTE: The right principle is always fair.

Mr. G. H. WENYON [F.]: I support the amendment. If the original amendment is carried you will be putting schools in a privileged position. ("No.") Many competitors play up to the assessors, there is no question about that, and the assessor should be above reproach, and the schools should be left out. Practising architects should be the competitors, not anyone from the schools.

The CHAIRMAN: This limits the schools to a greater extent than they are limited now. This is a measure of limitation, and it is open to the meeting to decide whether a greater limitation is desirable. It is my duty to put the amendment first. It is that the word "sole" be omitted, and that from "but" to the end of the paragraph be deleted.

Mr. DIGBY SOLOMON: This can be referred back to the Committee for further consideration, and in view of the strong feeling which has been expressed on both sides that would be well.

Sir BRUMWELL THOMAS: The matter has occupied some months of very serious consideration, and I am sure it represents the fair results of the views which came before us.

The CHAIRMAN: I will put the amendment; you are all clear what the amendment is?

There voted: for the amendment 12; against 17.

The CHAIRMAN: The amendment is lost. I am open to receive another amendment.

Mr. DIGBY SOLOMON: I will now propose that the matter be referred back to the Committee for further consideration.

Mr. JELLEY: I second that.

There voted: In favour 10; against 20.

The CHAIRMAN: That is lost. Now I will put this alteration, as it comes from the Committee.

There voted: In favour of the alteration 21; against 9.

The CHAIRMAN: That is carried.

Sir BRUMWELL THOMAS: The next point is a purely formal one. I move that on page 2, Clause 1, at the end of the second paragraph, the following words be inserted after "building":

"The foregoing scale is exclusive of travelling and other out-of-pocket expenses, which are to be charged in addition."

A Member: I have pleasure in seconding that, sir.

Mr. WELCH: I cannot understand anybody objecting to that.

Mr. KITSON: Is that retrospective?

Carried unanimously.

Sir BRUMWELL THOMAS: I beg to move that on page 3, Clause 6, Section (d), the following words be omitted: "or the estimate of the competitor should no outlay be stated."

The CHAIRMAN: Will you give the reason for that alteration? In a few rare instances the competitors are asked to make their own estimates, apart from any stated amounts.

Mr. KITSON: There must be an estimated cost or else there could not be a charge of one-fifth.

Mr. ANSELL: In some cases in a competition the cost is stated vaguely as the amount the promoters have in mind is so much. To penalise a man because he finds the conditions entail an outlay of 10 per cent. above that is rather unfair. If it is 10 per cent. above what the competitor states will be the cost of his scheme, that is another matter. He has only himself to blame if he gives as the amount of his own scheme one which is likely to be exceeded. But if it is merely that the promoters have in mind an expenditure of, say, £350,000, it is unfair to the competitor to penalise him because his rendering of the conditions entails 10 per cent. or more above that. The amount mentioned or given would cover that vague estimate of the promoters.

Mr. WENYON: I do not think an assessor should be given power, or encouraged, to tell the promoters of a competition that the assessor's estimate of the cost of the work is wrong. The assessors will sometimes tell the promoters that a certain competitor cannot carry out his design for the

cost. If a competitor's design is the best, he should be allowed to prove that it can be carried out for the cost which he states.

The CHAIRMAN: That is another point.

Mr. WELCH: If the author of a design were nominated as the architect, it would be too late for others to retrace their steps at a very much later date, except with the difficulty which I foresee here. Our conditions make it a stipulation that in the event of the author of a design placed first being disqualified, the author of the design placed second shall be appointed as architect. It is difficult, after all the figures have been taken out, to say the figure is too high. The average assessor, without taking full responsibility on his own shoulders, consults with his surveyor, who satisfies him that it is a reasonable figure. What I think is a little strong here is the use of the word "shall." I think "may" would make it easier. That question of cost is not always a vital point; the best design is what certain promoters require. They do not know what money is available, and I want to make it optional, on the score of cost, which would be carried out by saying "may be disqualified."

Sir BRUMWELL THOMAS: I now remember the occasion for this suggested alteration. A competition was held in which there was no definite limit of cost, and the best design had given an estimate of cost which was too low. The assessing ought to have gone to that design, but his own estimate was less than it would be possible to carry it out for. It was optional what price he put down, and he put a rather stupid price, and a long discussion took place over the award on account of this. The competitor had made a mistake in his estimate, but it was the best design. The assessor selected that design, and reported that in his opinion it would cost more. We thought that was a situation which might be repeated in the future, and there is no great advantage to us in the words which it is proposed to strike out, and there is no good reason for including them. But where, as in this case, a young architect had given an insufficient estimate, there is no other obligation on the assessor than to report whether he thinks it ought to be a higher figure.

The CHAIRMAN: That seems a valid explanation as a reason for omitting this phrase.

Mr. WELCH: He could drop the whole clause if he wanted to.

The CHAIRMAN: You must give that for protection.

Major CORLETTE: Is the object of a competition to find the architect with the best scheme, or the one with the design nearest to the cost stated in the conditions?

Mr. WELCH: You cannot generalise very well on that.

The alteration was carried, one voting against.

The meeting then held an informal discussion.

The Development of the R.I.B.A.

1. The time has come for making a further step forward in the process of development which has changed the R.I.B.A. from a small and comparatively unrepresentative body of London architects into a great institution with a world-wide membership and a federal constitution which links together the architectural profession throughout the whole Empire.

It is not uninteresting to trace the steps which have led us to the present position. In 1834 the R.I.B.A. consisted of a few score architects (including most of the leaders of the profession), meeting in modest rooms for the purpose of exchanging views, reading papers, and starting a library. In the course of 50 years this little body grew strong and influential. A Royal Charter in 1837, the grant of Royal Patronage, the foundation of the Royal Gold Medal, the creation of valuable prizes and studentships, the acquisition of more adequate premises, the building up of a unique architectural library—these were developments which led to a great increase in

membership, which was no longer mainly confined to the metropolitan area.

In 1887 a further big step was taken. A new Royal Charter improved the machinery and defined the status of the R.I.B.A., and, above all, enabled it to take provincial and colonial societies of architects into alliance, and provided for their representation by their presidents on the council.

By the year 1909 no less than 21 societies, at home and overseas, had been admitted to alliance, nine of their presidents sat on the Council, and the R.I.B.A. had begun to assume its true representative character.

In this year a supplementary Royal Charter brought a great increase in membership and influence. With the object of broadening the basis of the R.I.B.A. and so enabling it to approach Parliament with a claim for statutory registration a temporary class of licentiates was created. Though the privileges of this class were limited, no less than 2,200 were

admitted between 1910 and 1912, and it is universally acknowledged that this development brought with it a great increase in the usefulness and the prestige of the R.I.B.A.

Internal difficulties delayed progress with the Registration Bill in 1913 and 1914, when the war caused a necessary halt.

The course of events since 1919 is thoroughly familiar. In 1924 an agreement was at last arrived at with the Society of Architects to enable the Registration Bill to be backed by the weight of a united profession, and simultaneously the linking up of the R.I.B.A. and the Allied Societies was vigorously pursued, a great increase in their representation on the Council was arranged, and by means of the Allied Societies' Conference the great body of architects throughout the Empire were brought into closer and more helpful relations with the central organization. At the same time the disabilities of the licentiate class were swept away, and they became corporate members of the Royal Institute with full voting powers.

2. The position that has now been attained by the R.I.B.A. is summarized in the figures which can be found in the newly-issued *Kalendar*.

MEMBERSHIP OF THE R.I.B.A. AND ALLIED SOCIETIES.	
Hon. Fellows	9
Hon. Associates	89
Hon. Corresponding Members	59
Fellows	1,477
Retired Fellows	52
Retired Members of the Society of Architects	31
Associates	2,459
Licentiates	2,016
<hr/>	
Students	796
Subscribers	22
Probationers	2,636
Members of Allied Societies not Members of the R.I.B.A.	3,536
Members of the A.A. not Members of the R.I.B.A.	774
<hr/>	
	7,764
	<hr/>
	13,956

Of this great body of architects and architectural students by far the greater number are, of course, beyond the London area. Thousands of them are overseas.

The comprehensive character of this federation has no parallel among professional organizations—British or foreign. Its co-operating bodies include the Architectural Association of London with its 1,614 members, the Association of Architects, Surveyors, and Technical Assistants (each with its representative on the Council and the latter working in harmony with the newly-formed Salaried Members Committee) and 54 Allied Societies, Chapters, and Branches in Great Britain and Ireland, and 34 similar bodies in the Dominions Overseas, making a total of no less than 88 architectural societies working in association with the R.I.B.A.

3. The statistical table just given indicates one gap which remains to be filled. It will be seen that no less than 4,310 members of the Architectural Association and of the Allied Societies are not members of the R.I.B.A. In some of the Societies more than 80 per cent. of the members are also full members of the R.I.B.A. In others, and this applies chiefly to those at a distance, the proportion is far smaller. Many of these members are architects of high standing in their respective districts, many of them are men of mature age. In many cases it is not reasonable to expect them to seek membership of the R.I.B.A. by means of the qualifying examinations. It is obvious that the time has come to repeat the splendidly successful experiment of 1910–1912 and reopen the licentiate class to enable them to obtain direct membership of the Royal Institute, and so to complete the structure of professional organization towards which we have been moving through so many years and by such deliberate steps.

Inspired by these ideas, which were supported by a number of the most influential of the leaders of the profession both in London and in the Provinces, the Council and the Allied Societies' Conference have for a considerable period been meditating a proposal for carrying them into effect. This proposal was approved on 4 June, 1928 by a unanimous and enthusiastic vote of the Allied Societies' Conference which passed the following Resolution:—

"The Allied Societies' Conference held on 4 June, 1928, are unanimously in favour of the proposals for the development of the R.I.B.A. prepared by the Executive Committee. They feel that the proposals will be of inestimable value to the whole profession and strongly recommend that the procedure outlined in Part III of the report be put into operation forthwith."

On 9 July, 1928, the Council of the R.I.B.A. also approved the proposal by a unanimous vote and instructed a Committee to take the necessary steps for consulting the members upon it.

4. *The proposal is in effect that the sanction of the Privy Council should be obtained to the re-opening of the Class of Licentiates under the same conditions of admission as existed in 1910–1912. That is to say, that architects over 30 years of age who have been for not less than five years engaged in practice or who have been for not less than ten years engaged in the practice or the study of architecture, are to be invited to apply for election as Licentiates.*

It is the intention both of the Council and of the Allied Societies' Conference that the decision of the general body of members shall be taken upon this important question *only after the fullest consideration*, and that it shall be taken in a form which will enable every member in Great Britain and Ireland to record his vote.

A special general meeting is to be held in London on 8 January to enable members in the metropolitan area to discuss the question freely. The Allied Societies have been requested to call similar meetings in their respective areas so that the same discussion may take place there.

Finally, when the proposals have been fully explained and thoroughly discussed, a postal vote is to be taken under the provisions of Bye-law 70, and every member is to be urged to record his decision.

5. It is the desire of the Council at the same time to take advantage of this opportunity to put forward certain reforms which have long been felt to be desirable, and certain minor but necessary amendments to the Bye-laws. The Council, therefore, suggest that these matters should also be discussed informally at general meetings and the postal vote taken upon them afterwards.

It is felt that the old method of government of the R.I.B.A. by which power is ultimately exercised by a handful of members who may find it convenient to attend general meetings at Conduit Street is quite obsolete. It was reasonable enough in very early days when the R.I.B.A. consisted of a few hundred architects mainly living in or near London. It is quite inappropriate and unfair now for a body containing thousands of members, the majority of whom are hundreds or thousands of miles from London.

The Council has become a large and truly representative body. It contains elected members from all over the country and its numbers are greater than those of an average general meeting. It is felt, therefore, that the time has come for leaving to this representative body with its large contingent of non-London members most of the powers at present vested in the rather casual general meetings. This reform would be accompanied by improved machinery for ascertaining the views of members generally by means of the "referendum," while members would still have opportunities of expressing their views in the meeting room at the Annual General Meeting, the Annual Conference, and at Special General Meetings.

The minor reforms mentioned include such matters as the addition of two members to the Council to represent the two new areas in which Allied Societies have recently been formed—

Essex and the South-Eastern counties; and the addition of the chairman of the Allied Societies' Conference as an ex-officio member of the Council.

6. This scheme is put forward with an unprecedented weight of representative opinion behind it. It has been unanimously approved by the Council of 1927-1928, by the Council of 1928-1929, and by the whole Allied Societies' Conference. It has, therefore, the strong support of the official representatives of every organized body of architects in the country in alliance with the R.I.B.A.

The bearing of the proposals upon the question of registration is obvious. If we are to succeed in the near future in getting a Registration Act on the Statute Book we must do everything in our power to strengthen the representative character of the R.I.B.A. and its federation of allied societies, so that Parliament can have no excuse for questioning the solid attitude of the profession in regard to registration.

The success of this movement would be a convincing demonstration of the fact that the profession (the *bona fide* architects of the country) are solidly organized in the demand that they are making for an improved and guaranteed status.

It may be suggested that the existing members of the R.I.B.A. (and particularly those qualified by examination) are being asked to make too great a sacrifice, but it may be remembered that similar fears were expressed in 1907 when the first creation of the licentiate class was under discussion, and again in 1924 when the amalgamation of the Society of Architects was under consideration, and that these fears have proved to be quite groundless. The position of the R.I.B.A. has never been so strong or so respected as it is at the present moment. It has never before possessed so much influence with the general public, with the Government, and with the authorities generally. In this gain of general prestige every individual member of the R.I.B.A. has consequently benefited. The same thing has been true of the Allied Societies. They have never before been so strong, active, or influential as they are to-day, and the new proposals will carry on this advance.

THE INTERMEDIATE EXAMINATION.

NOVEMBER, 1928.

The Intermediate Examination qualifying for election as Student R.I.B.A. was held in London from 9 to 15 November, and in Manchester from 9 to 14 November, 1928.

Of the 108 candidates examined 38 passed and 70 were relegated. The successful candidates are as follows, the names being given in order of merit as placed by the Examiners: Bertram Harold Bates, Leslie Gilpin Mayman, Alfred Gerald Petter Frith, Kenneth John Campbell, Roy Lovell Phillips, Norman Best, Edward Francis Massey, Geoffrey Raven, Sydney Greenwood, Frank Marston, Charles Sykes, Margot Ulrik, Frederick John Sanders, Edward Cavendish Bubb, Thomas Burrington, John Percival Chaplin, George McDonald Chasser, Ernest Edwin Davis, Sidney Roy Edwards, Frederick Ernest Gibberd, Anthony Herbert, James William Hills, Robert Charles Hamilton Hinton, William Edward Humphrey, William Theodore Jackson, Morris Joseph (taking examination for certificate only), Gerald Auguste Charles Lacoste, Wilfred Laurence Lowry, Herbert Edward Nichols, Archibald John Passmore, Selwyn Berkeley Porteous, Lister Philip Rees, James Eugene Reid, Frederick Charles Rendell, Robert White Sherwin, Denis Balmforth Smith, Ernest William Smith, Stephen Frederic Edmund Soper.

R.I.B.A. STATUTORY EXAMINATIONS.

The R.I.B.A. Statutory Examinations for the Office of District Surveyor under the London Building Acts, or Building Surveyor under Local Authorities, will be held at the R.I.B.A., London, on 1, 2 and 3 May, 1929.

The closing date for receiving applications for admission to the Examinations, accompanied by the fee of £3 3s., is 10 April, 1929.

Full particulars of the Examinations and application forms can be obtained from the Secretary R.I.B.A.

ELECTION OF STUDENTS R.I.B.A.

The following were elected as Students at the meeting of the Council held on 3 December 1928:—

BANDEKAR, BABORAO GOVIND: Kambli Building, Topiwalla Lane, Grant Road, Bombay, India.

CHACKETT, LESLIE ARTHUR: "The Bungalow," Waxland Road, Halesowen, Birmingham.

JENKINS, GILBERT LAWRENCE MARTIN: 38 Elm Park Road, London, S.W.3.

MOORE, KENNETH EWAN: 92 Shirland Road, London, W.9.

PORTER, HERBERT GOULD: c/o The Architectural Association, 34 Bedford Square, W.C.1.

SMITH, CHARLES HUBERT BROAD: 8 Cross Street, Basingstoke, Hants.

SUTHERLAND, STEPHEN: Meddens, Newmachar, Aberdeenshire.

R.I.B.A. PROBATIONERS.

During the month of November, 1928, the following have been registered as Probationers of the Royal Institute:—

ADAM: JOHN DOUGLAS, Knox Manse, Arbroath, Forfarshire.

ANTROBUS: JOHN MOORE, "Hollywood," Chester Road, Erdington, Birmingham.

APPLEGARTH: ARNOLD, Station House, North Seaton Station, Ashington, Northumberland.

ARMITAGE: HARRY, 2 Prospect Place, Newbold Road, Chesterfield.

AYRE: EDWIN WILKINSON, 52 Alma Vale Road, Clifton, Bristol.

BALL: ALAN ROY BRADFORD, Teviotdale, Clarence Park, Weston-super-Mare.

BALLINGER: JOHN CHARLES, 16 Lichfield Road, Walsall.

BAMFORD: WALLACE, "Lyndene" Mesnes Road, Wigan.

BARBER: LAURENCE VICTOR, 55 Hanworth Road, Feltham, Middlesex.

BARNES: ARTHUR RALPH, 91 Kingston Road, Wimbledon, S.W.19.

BARTON: ALFRED JOHN GEORGE, 45 Lawford Road, N.W.5.

BARTON: STANLEY HERBERT, Nettleswell, Harlow, Essex.

BATTAGEL: ARTHUR TRETHOWEN, 101 Mildred Avenue, Watford, Herts.

BEST: HARRY SCOTT THOMPSON, 28 Carlton Road, Worksop, Notts.

BILLINGS: ERNEST HENRY, "Esla forde," Eaton Crescent, Swansea.

BLACKBELL: EDGAR WATSON, Central Fire Station, Sunderland, co. Durham.

BOOTH: ARTHUR, 50 Mary Road, Handsworth, Birmingham.

BRAMLEY: AMBROSE ROY, 71 Huntingdon Road, York.

BROADBENT: JOAN MARGARET, "Blythwood," Priory Road, Sale.

BROOKS: Raymond Samuel, 18 Blatchington Road, Hove, Sussex.

BUHL: CHARLES EDWARD FREDERICK, 57 Temple Road, Croydon, Surrey.

BURROUGH: THOMAS HEDLEY BRUCE, 6 Clifton Down Road, Clifton, Bristol.
 CARTWRIGHT: JOHN, c/o Hill, 77 Macdonald Road, Edinburgh.
 CASSÉ: RONALD JOHN, "Ashcroft," Hurst Green, Oxted, Surrey.
 CATTERMOL: HARRY SIDNEY, 626 Alexandra Parade, Dennistoun, Glasgow.
 CLARK: HERBERT HENRY, 138 Topsham Road, Upper Tooting, S.W.17.
 CLAYTON: THOMAS HILTON, 10 Sandiway Place, Altrincham, Cheshire.
 COOPER: SHEILA MARY, Karnafuli, Fetcham, Surrey.
 COOPER: JAMES BLACKSTOCKS, 119 Morrison Street, Edinburgh.
 CUMMING: DAVID KILPATRICK GRAHAM, 26 Pearson Park, Hull, Yorks.
 DADARKER: GAUPAT SHRIKRISHNA, No. 1 French Bridge, Girgaum, Bombay, India.
 DUDLEY-MOORE: ARTHUR, 14 Argyll Road, Westcliff-on-Sea, Essex.
 DANIEL: RONALD CAMPBELL BLAIR ARNOLD, "Quaint Cottage," Cookham Dean, Berks.
 DEEDMAN: ERIC ALFRED, "Highclere," Hockley, Essex.
 DICKINSON: CATHERINE, Grammar School House, Halesowen, Birmingham.
 DOCTOR: BHICAJI EDULJI, Chaves Bungalow, Girgaum Back Road, Bombay, India.
 DOHERTY: HUGH, 23 Clifton Crescent, Cliftonville, Belfast, Ireland.
 EASTWOOD: GEORGE RONALD, 47 Compton Street, Chesterfield, Derbyshire.
 EDWARDS: PERCY WILLIAM, 5 Emery Lane, Chippenham, Wilts.
 EGLINTON: RONALD WOLLSTEIN, 28 Princes Avenue, Tolworth, Surrey.
 ELGEY: CHARLES, 31 Adolphus Street, West Seaham Harbour.
 ELLIS: REGINALD ARTHUR CHARLES, 33 Camden Park Road, N.W.1.
 ELLISON: TOM WILSON, 44 Hornby Road, Blackpool, Lancs.
 ELSBURY: HAROLD FREDERICK FOSTER, 5 Connaught Road, Pokesdown, Bournemouth.
 EVANS: CYRIL GEORGE, "Oakdene" Station Road, Stoke Mandeville, Aylesbury, Bucks.
 FIELD: HERBERT CHARLES, 321 Hamlet Court Road, Westcliff-on-Sea, Essex.
 FINDLATER: GEORGE ROBERTSON, 11 Mary Street, Stockton Road, Sunderland, co. Durham.
 FORD: HARRY LESLIE JAMES, 30 Whippingham Road, Brighton, Sussex.
 FOWLER: NORMAN HAROLD, 107 Hall Lane, Armley, Leeds, Yorks.
 FRANKS: RONALD HERBERT, 8 Ferncliff Road, Dalston, E.8.
 FROST: HAROLD CHARLES RICHARD, 59 Stanley Road, St. James, Northampton.
 GASCOIGNE: ALICE ROSE, 9 Palgrave Road, W.12.
 GOODCHILD: MARTIN JOSIAH HERBERT, 5 Wood Vale, Cranley Gardens, N.10.
 GOUGH: WILLIAM EDWARD MASSEY, "The Hawthorns," Sunnyside Road, Weston Super-Mare.
 GREEN: ALFRED HENRY, "Lynwood," Carey Road, Newport, Mon.
 GRICE: KENNETH JOHN, Colman Hill Bungalow, Cradley, Staffs.
 HANDS: STANLEY JAMES, 39 Upper Holland Road, Sutton Coldfield, Birmingham.
 HALL: CHARLES ERIC, "Owthorne," North Road, Withernsea, E. Yorks.
 HARVEY: DAVID, 104 East Claremont Street, Edinburgh.

HASKINGS: BRUNEL FREDERICK GEORGE, Ty-yn-y-caea, Welington Street, Ext, Long Eaton, Notts.
 HAY: SIR ARTHUR THOMAS ERROLL, 6 Ravelston Park, Edinburgh.
 HEATH: ERIC THOMAS, 49 Clark Road, Wolverhampton.
 HEATHCOTE: JOHN STANLEY, 37 Millicent Road, West Bridgford, Notts.
 HESKETH: HENRY DAVID, 7 Valentine Grove, Everton, Liverpool.
 HICKTON: EDWIN HARRY, "Hythehurst," Thornhill Road, Streetly, Birmingham.
 HOMAN: WILLIAMINA KATHERINE, St. Hilda's, Western Road, Cheltenham.
 JACKSON: DONALD LESLIE, 3 Lancaster Villas, Old Shoreham Road, Brighton.
 JEFFREY: ALFRED ERNEST, 9 Morton Crescent, Fencehouses, co. Durham.
 JESSOP: JOHN CUNLIFFE, 27 Melbury Court, Kensington, W.8.
 JOHNSTONE: RICHARD DOWNING, 335 Oldpark Road, Belfast, N. Ireland.
 JONES: ALBERT EDWARD, 11 Manor Place, Paddington Green, W.2.
 KAYE: DUNCAN, 3 Warwick Avenue, Earlsdon, Coventry.
 KHATKUL: VISHWANATH VASUDEO, 31B Lamington Road, Grant Road, Bombay.
 KIRKPATRICK: DONALD MACDONALD, 6 Maxwell Street, Edinburgh.
 KNIGHT: ROBERT MUSPRATT, 53 London Road, Stroud, Glos.
 LACEY: ARTHUR METHUEN HOWARD, 51 Wycombe End, Beaconsfield, Bucks.
 LAMBIE: GEORGE KNOX, Patterton, Newton Mearns, Renfrewshire.
 LEEDHAM: GEOFFREY SELBY, 78 Thoresby Street, Princes Avenue, Hull.
 LEIGHTON: EVERETT CLIFFORD, 11 Park Crescent East, North Shields, Northumberland.
 LEITH: JACK, 10 Oak Terrace, Crossgates, Leeds.
 LEWIS: JOHN HERBERT, "Ingleside," The Parade, Pontypridd, Glam.
 LEWIS: ROBERT KENNETH, 134 Midland Road, King's Norton, Birmingham.
 LITTLE: REGINALD GODSON, Heckington, Sleaford, Lincs.
 LIVINGSTONE: DUNCAN, Venturefair Avenue, Dunfermline, Fife.
 MACFARLANE: ARCHIBALD ANDREW, 16 Duncarn Street, Glasgow, C.4.
 MACKENZIE: JAMES GEORGE, "Emilton," Kilbowie Road, Clydebank, N.B.
 MANUEL: ARTHUR CHARLES, 196 Bournemouth Road, Bournemouth, Hants.
 MAWBEY: FREDERICK MAX, "Rose Cottage," Woodborough, Nottingham.
 MCCROSSAN: RUSSELL PETER, 77 Ellerby Street, Bishops Park, Fulham, S.W.6.
 MENZIES: ALPHONSO CONSTANTINE, c/o Messrs. Stevens and Partners, Kodak House, 222 Hornby Road, Fort, Bombay, India.
 MHATRE: GAJNAU BABOORAO, Piroz Lodge, Shanker Shet Road, Bombay, No. 7, India.
 MORGAN: Montague Scott, 173 Preston Drive, Brighton.
 NEALE: REGINALD FREDERIC, 33 Station Road, Winchmore Hill, N.21.
 NICHOLS: JOHN, "Calleron," Cimla Road, Neath, Glam.
 NICHOLSON: WILLIAM LESLIE, 39 Thornlaw Road, West Norwood, S.E.27.
 NORFOLK: DEREK EVELYN WHITEWAY, "Arden," Berriedale Avenue, Hove, Sussex.
 NORTHGRAVES: NEVILLE HORNBY, "Kelvinside," Carr Lane, Acomb, York.

- ORAM : BERTHA, "Sunnycroft," Swithland Lane, Rothley, near Leicester.
- PAGETT : ALFRED WILLIAM JOHN, "Briars," Blackberry Lane, Halesowen.
- PARR : DENISE MARY CATHERINE, 122 Crowstone Road, Westcliff-on-Sea.
- PATKI : JANARDAN GANESH, Jawaji Building, No. 2/38, Chikhatwadi, Grant Road, Bombay, India.
- PATTISON : SAMUEL HUGH, Altone Terrace, Hillsborough Old Road, Lisburn, N. Ireland.
- PEAT : JAMES, 59, High Street, Pittenween, Fife, N.B.
- PORTER : HERBERT GOULD, Architectural Association, 34 Bedford Square, W.C.1.
- PLYE : LOUIS ALFRED, 79 Mill Road, Cambridge.
- * RAMSBOTTOM : NORMAN, 42 Tithebarn Street, Poulton-le-Fylde, near Blackpool.
- REDGRAVE : CLAUDE FRANCIS, 29 Stoneleigh Avenue, Coventry.
- RENNIE : ROBERT, c/o Walker, 108 Douglas Street, Blythwood Square, Glasgow.
- RICHARDSON : LAWRENCE IRVINE, "Oakburn," Shadwell Lane, Moortown, Leeds.
- RILEY : HAROLD FRANK, 81 Oxford Street, Liverpool.
- RIVETT : MAURICE SIDNEY, 232 Shaftesbury Avenue, Thorpe Bay, Essex.
- ROBERTS : KEITH PRESTON, 98 Macclesfield Road, Woodside, S.E.25.
- ROBSON : WILLIAM CALDER, "Low Fell," Walsall Wood Road, Aldridge, Staffs.
- ROLFE : EDGAR JOHN, 2 Elmcroft Street, Clapton, E.5.
- RUDDICK : LAWRENCE HOPE, 35 Emerald Street, York.
- SARGISON : VICTOR JAMES, 45 Keith Grove, W.12.
- SCOTT : WILFRID JOHN, 15 Orchard Terrace, Chester-le-Street, co. Durham.
- SHAPLEY : RONALD STUART, Newton Hurst, Chapelton Road, Leeds.
- SHARPLES : FRANK, 140 Lord Street, Fleetwood, Lancs.
- SIMMS : JOHN, 24 Hendham Road, S.W.17.
- SIMPSON : JOHN GRAYDON, "Giltar," Broomhill Road, Woodford Green, Essex.
- SMITH : COLIN HOLDEN, 186 Warwick Road, Sparkhill, Birmingham.
- SMITH : EDWIN GEORGE, 48 King's Road, Camden Town, N.W.1.
- SMITH : GEORGE ALFRED WILLIAM, 53 De Quincy Road, Lordship Lane, N.17.
- SMITH : WILLIAM ALWYNE, 672, Perstove Road, Selly Park, Birmingham.
- SMYTH : VALENTINE, 17 Kingsmere Avenue, Cliftonville Road, Belfast.
- STEVENS : JOHN, 22 Egbert Road, Winchester.
- STEVENSON : JOHN VALLANCE, c/o Eadie, 26 Gladstone Street, Glasgow, C.4.
- STIRLING : HECTOR JOHN WATT, 189 Wellshot Road, Shettleston, Glasgow, E.2.
- TEBBITT : MAXWELL CLIFFORD, Hornefield, Church Lane, Tottenham, N.17.
- THOMPSON : PATRICK MCGOWAN, c/o Soper, 54 Marchmont Road, Edinburgh.
- TIMMIS : GEORGE CHARLES, Cuddington Hall, Malpas, Cheshire.
- TORNBOHM : ERIC ANTHONY, "Linderna," East Boldon, co. Durham.
- TUCKER : LORAIN READ, Berkeley Lodge, Berkeley Road, Regents Park Road, N.W.1.
- TWYDELL : GEORGE EDWARD, 565 Holderness Road, Hull.
- VARDY : JOHN DREW, 46 Percy Park, Tynemouth.
- VERNON : ERIC STANLEY, "Elmhurst," Old Hednesford, Staffs.
- WATKINSON : PHILIP GEORGE, 10 The Ridgeway, Finchley, N.3.
- WATSON : PERCY ARTHUR, 60 Bournemouth Road, Folkestone, Kent.
- WEST : FRANK GEORGE, 42 Tantallon Road, Balham, S.W.12.
- WEST : JOHN CHARLES PERCY, 7 Hilsea Street, Clapton, E.5.
- WHARTON : HUGH, 22 Langdale Road, Wallasey, Cheshire.
- WHILE : GEORGE HUNT, "The Croft," Milroy Road, Sutton Coldfield.
- WHITELEY : FRANK LESLIE, 33 Salisbury Road, Blackpool.
- WILCOX : HAROLD, 105 Station Street, Bloxwich, Walsall.
- WITHAM : WILLIAM JAMES, 70 Ross Street, Cambridge.
- WOOD : LESLIE CHARLES, "Sunnyside," Grange Park Drive, Leigh-on-Sea, Essex.
- WOOD : ROBERT HUNTER, 7 Westhall Gardens, Edinburgh.
- WYLES : WALTER NORMAN, "Glengarry," Marine Parade, Clacton-on-Sea.
- ZIMMERMANN : SYDNEY, 9 Taymouth Place, Broughty Ferry, Dundee.

Notices

THE FIFTH GENERAL MEETING.

The Fifth General Meeting (Ordinary) of the Session 1928-29 will be held on Monday, 7 January 1929, at 8 p.m., for the following purposes:—

To read the Minutes of the General Meeting (Ordinary) held on 17 December 1928; formally to admit members attending for the first time since their election; to announce the names of candidates nominated by the Council for election to the various classes of membership.

To read the following paper: "The Expansion and Contraction of Building Materials due to Temperature, Humidity, Stress and Plastic Yield," by Oscar Faber, O.B.E., D.Sc., M.Inst.C.E. [Hon. A.R.I.B.A.].

To read the Council's Deed of Award of Prizes and Studentships 1929.

SPECIAL GENERAL MEETING.

TUESDAY, 8 JANUARY 1929.

A Special General Meeting will be held on Tuesday, 8 January, at 8 p.m., for the purpose of discussing proposals for the development of the R.I.B.A. which have been prepared by the Council.

The nature of these proposals is indicated in the memorandum which is printed on p. 168.

A statement will be made by Mr. E. Stanley Hall [F.], Vice-President, and the Chairman will invite free discussion of the proposals as a preliminary to a postal vote which will be taken at a later date, in accordance with the provisions of Bye-Law 70.

SPECIAL GENERAL MEETING.

TUESDAY, 15 JANUARY 1929.

A Special General Meeting will be held on Tuesday, 15 January 1929, at 5.30 p.m., when Mr. H. V. Lancaster, Vice-President, will read a Paper on "The Development of South London." Tea will be provided at 5 p.m.

This is the first of a series of Special Meetings which the Art Standing Committee hope to arrange, at which Papers on the Development of London and similar problems will be read.

CHRISTMAS HOLIDAY LECTURES ON ARCHITECTURE FOR CHILDREN.

Tickets for the informal talks to children on Architecture by Mr. and Mrs. C. H. B. Quennell—announced in the last issue of the JOURNAL—are now being issued, and in view of the large number of applications received it is anticipated that the supply will soon be exhausted.

The lectures will be held on the following dates:—

Friday, 28 December 1928 at 3.30 p.m.

Monday, 31 December 1928 at 3.30 p.m.

Friday, 4 January 1919 at 3.30 p.m.

They are for children only, but adults will be admitted if accompanied by children. No charge will be made for admission, and members who desire tickets are requested to make application as soon as possible.

PROPOSED TOUR TO THE UNITED STATES AND CANADA.

It will be remembered that an announcement was made in the JOURNAL some little time ago regarding a proposed visit to America, and the Secretary has pleasure in announcing that arrangements have now been completed for a party of members of the Institute and Allied Societies to make a short trip to the United States and Canada in July next.

The party will sail from Liverpool for New York by the Cunard liner *Laconia*, on 13 July, and will return from Quebec by the *Ascania* on 3 August, arriving in Plymouth 10 August, and London on 11 August. The places visited on the other side will include:—

New York—Washington—Detroit—Niagara Falls—Toronto—Montreal—Quebec.

he trip from Toronto to Montreal being made by steamer down the River St. Lawrence, passing the Thousand Islands en route.

The cost of the trip will be approximately £95, this figure including cabin class accommodation on the above-mentioned steamers, rail fares in the U.S.A. and Canada, hotel accommodation (exclusive of meals ashore), sight-seeing trips, etc., and it is believed the trip will prove most attractive.

The Secretary R.I.B.A. will be glad to hear from those members who are interested and to forward a detailed itinerary of the tour on request.

Relatives and friends of members will be welcomed.

ASSOCIATES AND THE FELLOWSHIP.

Associates who are eligible and desirous of transferring to the Fellowship class are reminded that if they wish to take advantage of the election to take place on 18 March 1929, they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 12 January 1929.

LICENTIATES AND THE FELLOWSHIP.

The attention of Licentiates is called to the provisions of Section IV, Clause 4 (b) and (c), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

ACCOMMODATION FOR STUDENTS OF ARCHITECTURE.

The widow of a well-known artist resident in St. John's Wood has two or three vacancies for young students of art and architecture as paying guests.

A comfortable home is offered in a congenial atmosphere, suitable for young people possessing common interests.

Further particulars can be obtained from the Secretary, R.I.B.A.

APPLICATIONS FOR MEMBERSHIP.

ELECTION 4 FEBRUARY, 1929.

The following applications for election have been received. Notice of any objection or other communication respecting the candidates must be sent to the Secretary for submission to the Council prior to Monday 7 January 1929.

AS FELLOWS [32].

AXTEN: HERBERT JOSEPH [A. 1912], Architectural Department, Northern Polytechnic, Holloway, N.7; 63 Cecil Road, Enfield, Middlesex.

COLLINS: OWEN HYMAN, M.A., P.A.S.I. [A. 1921], 115 Old Broad Street, E.C.2; "Avening," Granger Hill, Maidenhead, Berks.

DODD: RONALD FIELDING [A. 1920], 21 Turl Street, Oxford; 39A St. Giles, Oxford.

EATON: WILLIAM [A. 1890], 6 Penylan Place, Roath Park, Cardiff.

HAGELL: FREDERIC WILLIAM [A. 1909], 33 Furnival Street, E.C.4; 32 Harberton Road, N.19.

HORN: ROBERT WILLIAM [A. 1895], 20 Trongate, Glasgow; 30 Kersland Street, Glasgow, W.2.

HUMPHRY: FRANCIS JOHN [A. 1906], 17 Southampton Street, Bloomsbury, W.C.1; 9 Lovelace Gardens, Surbiton, Surrey.

KNIGHT: FRANK WARDEL [A. 1911], 3 Verulam Buildings, Gray's Inn, W.C.1; 7 Raeburn Close, Wildwood Road, N.W.11.

MARTIN-KAYE: DOUGLAS NIEL [A. 1919], School of Arts and Crafts, Southend; 99 Boston Avenue, Southend.

MEREDITH: EDWARD [A. 1915], 7 Goodmayes Road, Goodmayes, Essex.

PARHAM: ARTHUR DOUGLAS [A. 1923], Public Works Department, Colombo, Ceylon.

ROWSE: HERBERT JAMES [A. 1910], India Building, Water Street, Liverpool; "Arrochar," Heswall, Cheshire.

SAMPLE: EDMUND FREDERICK RONALD [A. 1922], c/o Messrs. Denison, Ram and Gibbs, 8A Des Voeux Road Central, Hong Kong.

SANVILLE: GERALD [A. 1905], 60 King Street, Manchester; Brow Cottage, Bollin Hill, Wilmslow, Cheshire.

SAVEGE: OLIVER FREDERICK, M.C. [A. 1926], 3 Market Square, Kuala Lumpur, F.M.S.; 5 Conlay Road, Kuala Lumpur, F.M.S.

SHINER: LAWRENCE ALEXANDER DAVID, P.A.S.I. [A. 1910], 34 Buckingham Palace Road, Westminster, S.W.1; Dukes Hall, Billericay, Essex.

THOMPSON: WILLIAM HARDING, M.C. [A. 1914], 5 Verulam Buildings, Gray's Inn, W.C.1; 8 Selwood Terrace, South Kensington, S.W.7.

WARD: FRANK DORRINGTON [A. 1909], Public Works Department, Straits Settlements; 80 Western Road, Penang, Straits Settlements.

WILLMOTT, EDMUND CHARLES MORGAN [A. 1906], 4 Park Place, Cardiff; "Marfred," Cyn Coed Road, Cardiff.

And the following Licentiates who have passed the qualifying Examination:—

GALLOWAY: DAVID WISHART, 2 Market Street, Brechin; Oldmanse, Brechin.

KEY : LANCELOT HERMAN, Director of Housing, Municipal Offices, Liverpool ; Red House, Allerton Road, Liverpool.
 KILLBY : ASHLEY SCARLETT, M.M., 83/85 High Street, Tunbridge Wells, Kent ; Hawkwell House, Pembury, Kent.
 LEE : FREDERICK WILLIAM HOBILL, 11 Waterloo Place, Leamington Spa ; 7 Northumberland Road, Leamington Spa.
 MAJOR : ERNEST HARRY, 43 Doughty Street, W.C.1 ; Queen Anne's Mansions, St. James' Park, S.W.1.
 MASEY : CECIL AUBREY, Grecian Chambers, Devereux Court, Strand, W.C.2 ; 17 Stafford Road, Wallington, Surrey.
 ROBINSON : JOHN JOSEPH, 8 Merrion Square, Dublin ; 5 Waltham Terrace, Blackrock.
 UNDERHILL : BARON COLLINGWOODE SEYMOUR, 33 Newhall Street, Birmingham ; 62 St. Albans Road, Moseley, Birmingham.
 WHITE : FREDERICK, 16 Cumberland Mansions, Bryanston Square, W.1 ; 9 Lyndale Avenue, Finchley Road, N.W.2.
 And the following Licentiates who are qualified under Section IV, Clause 4, c. (ii) of the Supplemental Charter of 1925 :—
 CAIRNS : JAMES DAVIDSON, 63 George Street, Edinburgh ; Arncliffe, Peebles.
 PENMAN : LARMONT DOUGLAS, Clydeview, Largs, Ayrshire ; Nithsdale, West Kilbride.
 SAGE : EDGAR, 32 Sussex Square, Brighton.
 YERBURY : JOHN EDWIN : 429 Strand, W.C.2.

AS ASSOCIATES [15].

ALLEN : ERNEST CECIL PORTER [Passed five years' course at the Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 6 Belsize Square, Hampstead, N.W.3.
 BULL : HENRY ALEXANDER HARVEY [Passed five years' course at the Technical College, Cardiff, Exempted from Final Examination after passing Examination in Professional Practice], 27 Westgate Street, Cardiff.
 CORNFORD : ROGER HENLEY COPE, B.A. (Cantab.) [Final], 59 Ranelagh Gardens Mansions, S.W.6.
 COTTON : ARTHUR CALVALEY [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], "Cedar Bank," Poplar Road, Oxton, Cheshire.
 CUMINE : ERIC BYRON [Passed five years' course at the Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 48 Szechuen Road, Shanghai, China.
 FELLOWES : NORTON ALEXANDER, B.Arch. (McGill) [Passed five years' course at McGill University, Montreal. Exempted from Final Examination after passing Examination in Professional Practice], 212 Westmount Boulevard, Westmount, Quebec, Canada.
 HARRIS : EDWARD RICHARD BINGHAM [Final], Bedford Row House, 58 Theobalds Road, W.C.1.
 HUTCHISON : WILLIAM MARTIN [Final], c/o R. A. Lippincott, Esq., Yorkshire Insurance Building, Auckland, New Zealand.
 MACFADYEN : IRENE JOANNA [Passed five years' course at the Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 9 Bury Street, Chelsea, S.W.3.
 MACKENZIE : KENNETH RONALD, B.Arch. (Liverpool) [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], "Seaforth," Molesey Avenue, Auckland Park, Johannesburg, South Africa.
 PARRY : HENRY THOMAS [Passed five years' course at Liverpool University School of Architecture. Exempted from Final Examination after passing Examination in Professional Practice], Post Office, Penmorfa, Portmadoc, North Wales.

PIERCE : STEPHEN ROWLAND [Special Exemption], 39 Great James Street, W.C.1.

ROBERTS : LESLIE HUGH BENNET [Passed five years' course at the Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 4 Sutcliffe Close, N.W.11.

THOMPSON : CAPTAIN ERIC LANGDON [Passed five years' course at the Architectural Association. Exempted from Final Examination after passing Examination in Professional Practice], 6 Bedford Row, W.C.1.

TURNER : ERNEST CHARLES [Special], 60 Lammas Park Road, Ealing, W.5.

AS HON. FELLOWS [2].

CHAMBERLAIN : THE RT. HON. ARTHUR NEVILLE, P.C., M.P., 37 Eaton Square, S.W.1.

PEEL : VISCOUNT, THE RT. HONBLE. WILLIAM ROBERT WELLESLEY, P.C., C.B.E., 34 Holland Park, W.11.

AS HON. ASSOCIATES [4].

DANIEL : AUGUSTUS MOORE, National Gallery, Trafalgar Square, W.C.

PENOYRE : JOHN, C.B.E., M.A., 8 King's Bench Walk, Inner Temple, E.C.4.

SMITH : SIR PHILIP COLVILLE, C.V.O., 55-60 Great Queen Street, W.C.2.

THOMPSON : ALEXANDER HAMILTON, M.A., Hon. D.Litt., F.B.A., F.S.A., Professor of History, University of Leeds, Beck Cottage, Adel, Leeds.

AS HON. CORRESPONDENCE MEMBERS [2].

HAMMOND, CHARLES HERRICK, President, The American Institute of Architects, 1335 East 52nd Street, Hyde Park Station, Chicago, Illinois.

LETROSNE : CHARLES, President, Société des Architectes diplômés par le Gouvernement, Expert pris le tribunal de la Seine, Officier de la Légion d'honneur, 21 Rue Henri Rochefort, Paris, XVII.

Competitions

BELFAST WAR MEMORIAL COMPETITION.

Members of the Royal Institute of British Architects and of its Allied Societies must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

COMPETITION FOR THE COLUMBUS MEMORIAL LIGHTHOUSE.

A copy of the report containing complete details of the conditions governing the above competition has been received in the R.I.B.A. Library. Members who desire to enter the competition are required to fill up a registration form and return it to the Pan American Union, Washington. A number of forms are being sent to the R.I.B.A., and can be obtained from the Secretary as soon as they are received. Preliminary details of the competition were published in the R.I.B.A. JOURNAL, 14 July 1928.

CHRISTCHURCH, NEW ZEALAND, ART GALLERY.

Competition for an Art Gallery to be erected in Christchurch, New Zealand, under the R. E. McDougall gift. Amount to be expended—£25,000.

Competition in two stages :—

1st Stage.—Pencil sketches from which will be selected by the Assessor three designs, each of the authors to receive £100 honorarium.

2nd Stage.—The authors of the three selected designs to compete and the one adjudged the winner by the Jury of Award will be employed as Architect.

Open to all architects on the Register of the Royal Institute of British Architects and all affiliated Institutions.

Assessor : Mr. S. Hurst Seager, C.B.E., F.R.I.B.A.

Jury of Award : The Donor; the Rev. J. K. Archer (who is at present the Mayor of Christchurch); Mr. R. Wallwork, Director of the Canterbury College School of Art, Christchurch (and at present the President of the Canterbury Society of Arts); and the Assessor.

Date for Questions : 12 October 1928.

Delivery of Plans : 13 February 1929.

Conditions to be obtained from the Office of the High Commissioner for New Zealand, The Strand, London, or from J. S. Neville, Esq., Town Clerk, Christchurch, New Zealand.

R.I.B.A. COMPETITION FOR A DESIGN FOR A GARAGE IN THE THEATRE AREA OF LONDON.

The conditions for the R.I.B.A. Competition for the Design of a Garage in the theatre area of London, the prize money for which has been presented by Mr. H. S. Horne, of 74, Park Street, London, W.1, have now been issued and copies may be obtained free by intending competitors on application to the office of the R.I.B.A., 9, Conduit Street, London, W.1.

The competition is open to architects and students of architecture of British nationality.

The first prize is a sum of £350, and in addition £140 will be divided at the discretion of the assessors between competitors whose designs are considered especially meritorious.

The attention of the Assessors has been called to references in the press to the R.I.B.A. Competition for a Design for a Garage in the Theatre area of London.

The Assessors wish to point out :—

- (1) That the whole competition is hypothetical.
 - (2) That there is no intention on the part of the R.I.B.A. to convey the impression that the building will be executed.
 - (3) That the designs and drawings will remain the property of the competitors.
- The site is purposely left indefinite so as to give full scope for new ideas on this interesting subject.

SIMON BOLIVAR MEMORIAL.

PRELIMINARY DETAILS OF A COMPETITION FOR THE ERECTION OF A MONUMENT TO THE LIBERATOR BOLIVAR IN THE CITY OF QUITO.

A competition has been opened for the erection in Quito of a monument to Bolivar.

The Ecuadorean Minister in Paris and two members of the Sociedad Bolivariana of Quito, residing in Paris, will form a Committee to organise and carry out the said competition.

A jury of four members, composed of experts, artists and art critics will judge the works presented.

The designs, "Esbozos" (drawings or sketches), "maquettes," etc., which it is desired to present must be forwarded to the Legation of Ecuador, 91 Avenue Wagram, Paris, not later than 31 March 1929.

The sum of 2,000,000 French francs is available for

the purpose of erecting the monument. This sum includes the fees of the artist who will carry out the work, either by himself or with others acting under his direction.

Honourable mention will be awarded to the authors of the designs adjudged second and third.

The decision of the Jury will be submitted to the Sociedad Bolivariana, of Quito, for ratification, prior to the contract with the author of the selected design being signed.

Members' Column

Mr. J. B. COOPER [A.]

Mr. J. B. COOPER [A.] has resigned his position as Assistant Architect on the staff of the Shanghai Municipal Council and is spending the next few months in travel and study, chiefly in the U.S.A. Any communications may be addressed to c/o 20 Divinity Road, Oxford, whence they will be forwarded.

Mr. W. L. LUCAS [F.]

OWING to continued ill-health Mr. W. L. Lucas, F.R.I.B.A., is compelled to relinquish practice and is giving up his offices at 3 Buckingham Street, Westminster, before the 1st January, 1929. He hopes to be well enough to do a certain amount of consulting work from his private house, 51 South Audley Street, later on in the year.

FORMATION OF PARTNERSHIP.

MR. WALTER M. EPPS, F.R.I.B.A., of 616/617 Bank Chambers, 329 High Holborn, W.C.1, has taken into partnership Mr. Claud V. Ponder, A.R.I.B.A., and the firm will practise at High Holborn.

CHANGE OF ADDRESS.

MR. JAMES O. HUGHES [A.] has changed his address to 16 Dickson Road, Eltham, S.E.9.

MR. W. T. LOVEDAY [A.] has changed his address to 2A Lawrence Sheriffe Street, Rugby.

PARTNERSHIP WANTED.

L.R.I.B.A. with extensive experience in most classes of building, including works of considerable size, desires position with established firm with a view to future partnership. Small capital available; willing to consider position abroad. Is able, energetic, reliable, used to control of offices; successful in competition work; good references.—Apply Box 1212, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

MEMBER requires partnership in well-established practice in Plymouth. Work in hand in the district £10,000 value. Well experienced in domestic, factory, shop, hospital design. In strictest confidence.—Apply Box 0180, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

PARTNERSHIP required in London or Kent district by A.R.I.B.A. with wide and exceptional experience as designer and detailer of high class domestic, bank and office buildings. Highest references.—Apply Box 1128, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

PRACTICE OR PARTNERSHIP WANTED.

MEMBER (43) desires to purchase genuine established practice or partnership, preferably in West or East Riding of Yorkshire or South of England will be considered.—Apply Box 1112, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

MEMBER (age 41), 18 years in practice, which is at present dormant, desires to purchase genuine, well-established practice or partnership with firm of standing. South Coast or West of England preferred.—Apply Box 2598, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

PARTNERSHIP.

ADVERTISER, 35 years in successful practice in West of England, requires a Partner.—Apply Box 2611, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

LONDON ARCHITECTS (F.F.R.I.B.A.), with interesting practice, would be willing to consider an application from a young energetic architect of good personality and able to secure work, with a view to partnership. Reply with brief particulars in first instance to Box 1911, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

LOCAL AGENT.

ARCHITECT and Surveyor in private practice in the West of England would act as a local agent for London or other architects having work in this district.—Apply Box 9268, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

OFFICE ACCOMMODATION.

ASSOCIATE of the Institute with offices in Lincoln's Inn Fields has fine large room to let, with service attendance for entrance, etc. Would suit provincial firm requiring London office admirably. Open to discuss conditions with suitable applicant, who must be a principal and Member of the Institute.—Apply Box 6628, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

FELLOW of the Institute with a West End office having a room to spare, desires to meet another architect with a view to sharing accommodation and running expenses.—Apply Box 7474, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

F.R.I.B.A. with an office in the West End desires to meet another architect with a view to sharing accommodation and running expenses.—Apply Box 2118, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

TO LET.

COMPLETELY fitted large drawing office and private room near Temple. Quiet with perfect lighting.—Apply direct to Cecil Masey, L.R.I.B.A., Grecian Chambers, Devereux Court, Strand, W.C.2.

TRADE CIRCULARS.

MR. CHARLES E. COMPTON [L.] has removed his offices to 49 Llanthwy Road, Newport, Mon., and wishes trade circulars sent to this address.

FOR SALE.

SEVENTEEN volumes of the *Building News* for sale, well bound, from 1887 to 1895. What offers? Share carriage.—Reply Box 5393, c/o The Secretary R.I.B.A., 9 Conduit Street, London, W.1.

Minutes V

SESSION 1928-1929.

At the Fourth General Meeting (Ordinary) of the Session 1928-1929, held on Monday, 17 December 1928, at 8 p.m., Mr. Maurice E. Webb, D.S.O., M.C., Vice President, in the Chair.

The attendance book was signed by 13 Fellows (including 6 members of Council), 14 Associates (including 2 members of Council), 3 Licentiates (including 2 members of Council), 2 Hon. Associates and several visitors.

The minutes of the Special and Business General Meetings held on 3 December 1928 having been published in the JOURNAL were taken as read, confirmed, and signed as correct.

On the motion of the Chairman the following resolution, passed at the Special General Meeting held on 3 December 1928 was confirmed:—

"That this meeting hereby approves, ratifies and confirms the Provisional Agreement for the Sale of No. 28 Bedford Square made between the Royal Institute of British Architects and the Architectural Association, produced to the meeting, and, for the purposes of identification, initialled by the President, and directs the Council of the Institute to carry the said agreement into effect."

The Hon. Secretary announced the decease of:—

Frank Wallis Eggins, elected Associate 1922.

Wilfred Langcake, elected Associate 1925.

James Aynsworth Lindsay, elected Licentiate 1911.

William Arthur Harvey Masters, elected Licentiate 1910.

and it was Resolved that the regret of the Institute for their loss be entered on the Minutes, and that a message of sympathy and condolence be conveyed to their relatives.

The following members, attending for the first time since their election, were formally admitted by the Chairman:—

Captain W. T. Creswell [*Hon. A.*].

Mr. J. G. Hinton [*A.*].

The Chairman announced that by a resolution of the Council Arthur Percy Harrison had ceased to be a Licentiate of the Royal Institute.

Mr. Basil Ionides, having read a paper on "Modern Glass," a discussion ensued, and on the motion of Mr. Henry M. Fletcher [*F.*], seconded by Mr. Norman Wilkinson, a vote of thanks was passed to Mr. Basil Ionides by acclamation, and was briefly responded to.

The proceedings closed at 9.50 p.m.

THE A.B.S. OPTIONAL POLICY.

The Architects' Benevolent Society offers an attractive "Ten Years Optional Policy," particularly designed to interest the young architect. The special feature of the policy is that it avoids the necessity of a decision at the outset as to the ultimate form and amount of the policy.

For the first ten years under this scheme, the full sum assured is payable in the event of death, the premium payable being less than that for an ordinary Whole-Life With-Profit Assurance. If death should occur during the first ten years the return in cash is very large compared with the amount of the premiums paid.

For example, in the case of a man aged thirty a policy for £1,000 can be obtained for a quarterly deposit of £5 12s. 11d. (or annually £21 10s.).

At the end of ten years the Assured has the choice of one of the following four different forms of benefit:—

- (1) The policy may be continued at the same premium for the full amount assured as an ordinary Whole-life With-profit Assurance for £1,000.
- (2) The assurance may be continued at the same premium, as a With-Profit Endowment Assurance for a reduced amount, e.g., £766 maturing at age 65, £660 at age 60, or £542 at 55.
- (3) The full amount assured, viz., £1,000, may be continued as a With-Profit Endowment Assurance at an increased annual premium, e.g., £31 13s. 4d. payable at age 65, £39 5s. 10d. at 60, or £53 at 55.
- (4) The payment of the premium may cease altogether and the policy be converted into a fully paid-up With-Profits Assurance, either Whole Life or Endowment, as desired. (Whole Life £331, Endowment £270 at 65, £251 at 60, or £228 at 55.)

Special "House Purchase" Option.

If after five years the Assured should require an advance towards the purchase of a house under the Architects' Benevolent Society "House Purchase Scheme" (applicable only in Great Britain), the policy may be used as part of the collateral security for the loan. If this were done a considerable saving could be made.

N.B.—Under options (1) to (4) the policy will be entitled to share in profits declared in respect of the period after ten years, so that the figures quoted above will be considerably increased.

It should be noted that unlike all other schemes of convertible assurance the premiums are not increased when the change is made, unless an Endowment Assurance for the full amount of the policy is chosen, and even then, no further medical examination is required.

Please write for particulars and special terms to the Secretary, Architects' Benevolent Society, 9 Conduit Street, W.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expression of the Institute.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

R.I.B.A. JOURNAL.

DATES OF PUBLICATION.—1929: 12, 26 January; 9, 23 February; 9, 23 March; 13, 27 April; 18 May; 1, 15, 29 June; 13 July; 10 August; 21 September; 19 October.

1928

tractive
interest
is that
to the

l sum
payable
Profit
years
ount of

cy for
s. 11d.

one of

um for
With-

mium,
educed
age 60,

tinued
creased
age 65,

er and
Profits
esired.
at 60,

dvance
nitects'
(appli-
used as
is were

tled to
d after
e con-

f con-
en the
he full
further

Secre-
W.

ters of
JURNAL
rs and

bscrip-
ssity of
to this
payable

9, 23
15, 29
ber.